SPECIAL COLLECTOR'S EDITION – DON'T MISS IT

ISSUE 86 ■ SEPTEMBER 1996 ■ £4.50

ST FORMAT

ROLL THE CREDITS

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THE SHOWS MUST GO ON

The most exciting Atari events this year

REVIEWED:

- POSITIVE IMAGE
- ARABESQUE
- CONVECTOR PRO
- NEODESK/GENEVA

Look into the FUTURE

All about the latest machines based on Atari technology

FEATURED THIS MONTH:

- ATARI CLONES
- VIDEO TITLING
- ATARI FORCE: THE NEXT GENERATION
- MAXIDISK TUTORIAL
- ABSOLUTE BEGINNERS
- ALL GOOD THINGS...

ALL GOOD THINGS...

As *ST FORMAT* closes its doors and rides majestically off into the sunset, we take a minute to say goodbye and thanks

Future PUBLISHING
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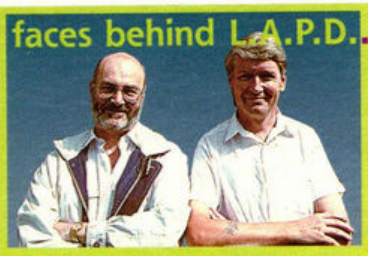
GAME REVIEWS: SPICE ● CONQUEST OF ELYSIUM ● BIO HAZARD 2 ● NBA JAM

L.A.P.D.

L.A. P.D.

The faces behind L.A.P.D...



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games

ARCADE

G.469 ASTRO 2000: A re-working of the classic 'Asteroids' arcade game. ***NEW***
G.473 BLUDGUSH: Blast enemy soldiers that dare to appear on your monitor screen. ***NEW***
G.472 TANKS (STE): Multi-player mine laying and dodging game in the style of 'Dynablaster'. ***NEW***
G.471 TANKS (STFM): As the game above but for STFM machines. ***NEW***
G.466 ZAPTASTIC 2 (S/W): A fast action arcade blast in the style of Llamatron.
G.467 BANG & BLASTMAN (1Mb): Explosive 2 player Bomberman action (2 joysticks).
G.468 SUBAQUA (S/W, Falcon compatible): Highly rated underwater shoot 'em up.
G.463 PARALLAX PAINTER: Three dimensional platform/puzzle game.
G.449 MICHIGAN MIKE & THE LOST CITY OF ZOROG: Super new platformer in the rain forest
G.454 TRAPPED II: Ten levels of fast 'Light Cycle' action (1Mb, STE, S/W) (Order G455 for STFM)
G.448 H.E.R.O.: Human Extraction & Rescue Operation: One time commercial platform game
G.450 THE ORIGINAL: Colourful 'Boulderdash' type diamond mining puzzle game
G.457 DEADLAND: Search and rescue mission 'Cannon Fodder' style
G.456 SUPER CHICKEN: Collect eggs with a giant chicken using escalators and ladders.
G.460 SKYDUEL: A single or multi-player air combat game; ballistic missiles, dogfights and ground attacks.
G.433 GENOCIDE: (1Mb, STE, S/W): Fast space 3D shoot 'em up.
G.417 STAR VOYAGE: Intergalactic action – requires 2 joysticks (Ex Star Trek - TNG). (2 disks/£3.00, 1Mb)
G.413 COMBAT: Fast action military shoot 'em up in style of Operation Wolf
G.410 PACMAN ON E: One or two player classic 'PacMan' with sampled music (1Mb, STE)
G.405 ULTIMATE ARENA: Beat 'em up in the style of 'Mortal Kombat' (STE, 1Mb, S/W).
G.403 SQUARE OFF: The ultimate tumbling block 'Tetris' game (STE, 1Mb) (2 disks/£3.00).
G.398 ASTEROIDIA (STE): Classic asteroid blasting action – order G399 for STFM version (1Mb, S/W).
G.395 DYNABUSTER: Bomb laying and dodging arcade game (STE, 1Mb).
G.366 DAVE MUNSIE GAMES: 9 games from the master programmer, including Frogger (1Mb).
G.355 WING LORD: Aerial duelling game in the style of the classic 'Joust'.
G.380 STARBALL: Pinball game - arguably the best PD game on the ST!
G.381 MAX: Help Max find his girlfriend. A 'cute' arcade platform game (1Mb).
G.286 ROCKFALL - SPECIAL EDITION: Tunnelling/diamond collecting puzzle game.
G.80 TETRIS & PILE UP: Two very good versions of the 'Tetris' arcade game.
G.171 HACMAN II: 1 megabyte version of PacMan, 100 new levels!
G.110 LLAMATRON: 100 levels of fast arcade action with wicked sound FX.
G.201 BLAT!: 'Tetris' style three in a row, falling blocks with many added features.

FANTASY/ROLE-PLAY

G.425 ANORAKS OF DOOM: First person view fantasy role-playing game. (2 disks/£3.00)
G.124 SPECTRAL SORCERY: Excellent game of battling wizards.
G.172 HERO II: Detailed graphic role-play adventure (1Mb)
G.416 DANGIMERE: Detailed fantasy role-playing game. (1Mb, 2 disks/£3.00)
G.412 NISHIRAN: Classy sci-fi, first-person view role-playing game. (1Mb) (2 disks/£3.00).
G.198 OMEGA: A large and complex wilderness and dungeon adventure with hours and hours of play (1Mb)
G.431 REALMS OF REALITY: First-person view dungeon exploration and monster-bash.
G.351 TOWERS: First-person view role-playing fantasy adventure game (1Mb) (2 disks/£3.00).
G.452 LAP OF THE GODS: Complex German language fantasy role play game (1Mb, mono, 2 disks/£3.00)
G.308 WALLS OF ILLUSION: The ultimate 'Dungeonmaster' clone with English instructions (1Mb).
G.426 WYRD WAYS: Magical combat in a maze of sliding walls (1Mb, S/W).
G.5 MORIA: A complex fantasy D&D based role-play game. (1Mb).
G.370 MINDMELT: Fantasy adventure with an overhead view.
G.288 DARKLYTE: 'Space Crusade' type droids wargame.
G.237 CHAOS: Madcap game of battling wizards by Martin Brownlow (1Mb or 0.5Mb)
G.262 ALIENSI: Space Marines v Aliens strategy combat game.
G.115 MYSTIC WELL: Complete 'Dungeonmaster' style adventure game.

PUZZLES

G.469 ASTROQUEST: A quiz program with over 500 astronomy related questions. ***NEW***
G.461 SHAPE UP (1Mb, STE): A puzzle game of placing coloured squares on a grid.
G.436 SHRINKING WALL SOLITAIRE (1Mb): Challenging and addictive 'Match it' type game.
G.443 WORD QUEST: Construct and play word squares. Over 50 puzzles on disk
G.446 THE FRENCH COLLECTION: Three puzzle games; MANCIOLA, QUINZAINE & MOLECULE.
G.387 SPACESWEEPER: A challenging 'Minesweeper' game in three dimensions!
G.311 JIGSAW: A computerised jigsaw puzzle (1Mb).
G.269 QUIZMASTER: Multi-choice answer general knowledge quiz (STE).

TEXT ADVENTURES

G.158 LOTTERY: Adventure in the red light district of San Francisco
G.462 CYBERCOP: Future cop murder investigation. ***NEW***
G.411 ROBOT REVOLT: A sci-fi text adventure.
G.162 AROUND THE WORLD IN EIGHTY DAYS: Try to emulate Phineas Fogg.
G.184 HEATHER'S EASTER EGG HUNT: Adventure for 7 to 12 year olds.
G.394 THE SECRET PARK: A text adventure with graphics for children 8 years upwards.
G.362 MARCH OF THE MODS: Strive to become 'Ace Face' (contains mild swearing, violence and drug abuse)
G.225 CAILYNVORN: D&D type fantasy adventure set on a far earth-like planet.
G.140 A NIGHT ON THE TOWN: An adventure with the opportunity to meet the girl of your dreams and ...well, the rest is up to you.
G.91 QUEST FOR THE HOLY GRAIL: Pythonesque madcap humour.
G.202 UNNKULIAN UNDERWORLD: Highly rated large scale text fantasy adventure.

GRAPHIC ADVENTURES

G.383 MOBSTERS' CITY: Track down twelve gangsters.
G.246 HYSULA: 3D virtual reality fantasy adventure.
G.217 THE MAZE: 3D adventure game loosely based on 'The Crystal Maze'.
G.321 INVESTIGATION: Graphic adventure in the style of Sierra On-Line (2 disks/£3.00)
G.356 ENDURANCE (1Mb): Space station adventure in 3D virtual reality
G.200 ANARCHY ACADEMY: 3D graphic adventure to blow up the school!
G.222 GRANDAD AND THE QUEST.....:3D graphics adventure by Ian Scott. Shareware (1Mb).
G.303 GRANDAD AND THE SEARCH FOR THE SANDWICHES: Graphic adventure (1Mb, 2 disks/£3.00).

STRATEGY & OTHERS

G.437 BINGO! (1Mb): Simulation of the seaside game with voice.
G.438 RACE (1Mb): Try to succeed in the 'Rat Race' of life (Board game adaptation)
G.432 MIDI-WIZ: Fantasy war game with similarities to 'Civilisation'. (1Mb, S/W).
G.131 STAR TREK - THE GAME: Defeat the Klingon threat to the galaxy (1Mb).
G.427 AIR TRAFFIC CONTROLLER: Control comings and goings at a busy international airport.
G.386 STAR TREK - KLINGON WARS: A Starship Enterprise battle simulation (1Mb).
G.431 REALMS OF REALITY: 'Dungeonmaster' type exploration and adventure (1Mb).
G.421 WAR: A wargame construction kit (1Mb).
G.290 SOFTWARE PROJECTS: Run a software company business sim.
G.390 INTERNATIONAL MANAGER: European Nations/World Cup management game.
G.391 ANCIENT GAME OF GO: Two computer versions of the Oriental game (Gnugo, Amigo).
G.344 CHESS-MATE: A chess/draughts game analysis tool.
G.332 CAESAR: Strategy game set around the Mediterranean in 200BC (S/W).
G.330 GNU CHESS: French chess playing program for all levels.
G.388 STRATAGEM: Two player strategy world war game (2 disks/£3.00).
G.329 PEGASUS: Space strategy game. Seek out and colonise planets (1Mb) (2 disks/£3.00).
G.287 THE COARSE ANGLER: Angling simulation game (1Mb).
G.324 IMPERIAL CONQUEST: Complex ancient Mediterranean game of conquest (S/W).
G.325 SOCCER MANAGEMENT: A complex simulation of soccer management (S/W).
G.173 PENGUINS: Move your penguins around the screen 'Lemming' fashion.
G.10 VEGAS: Roulette, poker, blackjack and slots... without the Nevada sand!

budgie uk

BU.119 FOOTBALL TACTICIAN 1: The original £19.95 Premier League version of the soccer management game!
BU.111 INTERNATIONAL CRICKET II: Animated 3D game (1Mb).
BU.90 MATCH IT: Possibly the most addictive game ever devised.
BU.89 HORSE RACING SIM: Quality sim from the sale ring to the track.
BU.86 QUATRIS: Superb 'Tetris' style puzzle game with falling cubes.
BU.71 DARK WARS: Role-playing adventure with a 3D view.
BU.70 PACMAN ST: The definitive version by Robert Leong.
BU.50 SPACE INVADERS: Classic arcade action by Robert Leong.
BU.30 QUEST FOR GALAXIA: The "Galaxians" return to your ST.
BU.10 MONEYSPINNER: Slot machine action with nudges, holds, gambles and more.
BU.8 SPECULATOR: True to life features market simulation.
BU.5 PRO DARTS: Mouse controlled 501 match play.
BU.4 OTHELLO: An immaculate implementation of the board game.
PRO.1 ELECTRONUC BANK STATEMENT: Home money managing program.

ST FORMAT TOP 10 GAMES - ONLY £12.00

A special bargain bundle of the top 10 PD and shareware games as selected by ST Format magazine in issue 75. They are 4-7-11, Colortris, Drachen, Grandad and the Quest for the Holey Vest, Grandad and the Search for the Sandwiches, Llamatron, Ozone, Starball, Stello, Super Breakout and Towers.

L.A.P.D. Licenceware Games

Possibly the best licenceware range on the ST

Licenceware means that for every copy you buy the author receives a royalty payment from L.A.P.D. This ensures that the authors receive suitable recompense for their hard work thus encouraging them to produce even more excellent programs for the Atari range of computers. It saves you all the fuss and hassle of shareware payments. Licenceware programs are complete and ready to run, there are no hidden fees!

strategy games

L.138 EMPIRE STAR (£3.00): Science fiction wargame, similar to 'Empire' for 1 to 3 players. ***NEW***
L.136 TRADER (£3.00): Sea trading game set in 14th century northern Europe.
L.135 ANNEX (£4.95): 3D role-play inspired by 'Dungeonmaster' and 'Doom' ***NEW***
L.128 BLUDGEON V.2 (1Mb, £3.00): Computer moderated fantasy combat system for one or more players. Includes two free adventure scenarios.
L.129 BLUDGEON ADVENTURES #1 (£3.00): Six additional solo adventures for the above BLUDGEON game.
L.124 THE SANDS OF MARS (£3.00): Govern a Martian mining colony.
L.132 SEA WAR (1Mb, £2.50): Hi-tech version of 'Battleships'. Design and fight your own fleet.
L.105 CONQUEST 2 (1Mb, £3.00): Rule over a medieval kingdom's economy and armies.
L.104 WAR OVER THE REICH (1Mb, £3.00): Plan and execute a campaign of WWII raids against twelve German cities.
L.98 WORLD AT WAR (1Mb, £3.00): A game of economic and military strategy on a grand scale for one to seven players.
L.22 GRAND PRIX MANAGER (£2.50): Simulation game of running a Formula One Grand Prix team.
L.79 DARKLYTE II (1Mb, £3.00): A sci-fi space/strategy game in which you must destroy the Darklyte forces. Reminiscent of the 'Space Crusade' game.
L.59 ARTHUR OF THE BRITONS (1Mb, £3.00): A strategy game with arcade sequences.
L.60 CONQUEST (1Mb, £3.00): A 'God' game in which your task is simply to survive for one year.

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arcade games

L.141 SAVAGE SPACE (1Mb, £3.00): 3D Space combat in the style of 'Wing Commander'. ***NEW***
L.139 BANG & BLASTMAN PLUS (1Mb, 2 disks/£6.00): Explosive 2 player Bomberman action (2 joysticks). ***NEW***
L.130 DESERT HAWK (1Mb, £3.00): Control a Black Hawk helicopter through different missions.
L.87 STORM (1Mb, STE, £3.00): Arcade action clearing aliens from a stricken space-freighter.
L.91 STORM (1Mb, STFM, £3.00): As L87 above but for the STFM.
L.117 FISH TANK (£3.00): A game for younger players who must find food for their fish without getting eaten.

adventure & role-playing games

L.143 SECRET WEAPON (£3.00): Adventure in a 3D world with a sense of uncanny. ***NEW***
L.131 WANDERING SCIENCE (£2.50): Solve the puzzles on an alien vessel. A graphic adventure.
L.125 PATHS OF GLORY (£3.00): A sword and sorcery role-playing game.
L.115 DEMON II (1Mb, £3.00): A fantasy adventure game with an overhead view and detailed point and click interface.
L.114 TIME MACHINE (£3.00): A classy text based adventure with over 100 locations and over 40 graphic screens.
L.112 CRAGHAVEN (£2.50): High adventure in a fantasy land.
L.97 STONE COLD SOBER (£4.00): A traditional adventure game but with a point and click interface.
L.69 BIO-HAZARD (1Mb, £3.00): A first person perspective game to clear a space freighter of alien creatures.
L.21 DEAD OR ALIVE (£3.00): A large, complex and humorous text adventure game.
L.31 THE CURSE OF AZRIEL (2 disks, £4.00): A graphic fantasy role-playing/trading game.
L.41 MURDER ON THE ORION EXPRESS (£3.00): A murder mystery game with an almost infinite variety of solutions.
L.50 DEMON (£3.00): Trapped in a stone cell, your first task is to escape before the resident demon gets back. 3D view.

puzzles

L.140 SEVEN KEYS (£3.00): Increasingly challenging temple exploration game ***NEW***
L.133 LAZER (£2.50): Use mirrors to direct a lazer around mazes.
L.102 DCS COMPILATION #4 (£3.00): On this disk are: BRAIN DAMAGE, test your brain to the limit. SHAPES, make shapes from 16 different pieces. LINK, form a chain across the screen. QUIZICAL, multi-choice question and answer game.
L.101 DCS COMPILATION #3 (£3.00): On this disk are: OUTRAGEOUS FORTUNE, a collection of logic and maths challenges. MATCH MAKER 2, match symbols on hidden cards. FRAME OF MIND, a gambling game. CRYPTOGRAM, based loosely on the TV program 'Countdown'.
L.66 HEARTBREAK (£3.00): An infuriating and highly addictive puzzle game played on a 7 x 7 grid.

art & graphics

A.111 AIRCRAFT CLIP ART: Over 60 images of modern aircraft and helicopters in IMG format. ***NEW***
A.99 MINIPICS II: All resolution picture converter and cataloguer (1Mb).
L.77 AUTO-STEREOGRAM: Create your own 3D 'Magic Eye' pictures (1Mb) (£3.00).
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A.36 KOZMIC 4: Complete version of the stunning psychedelic pattern creator.
A.1 ANI ST: Commercial quality animation program (once cost £60.00 to buy!).
A.84 GEMVIEW: Load, view, convert just about any picture format (1Mb).
A.45 CRACK ART: Demo version of the excellent German art program.
A.75 POLYFILM by Martin Brownlow. Make films from multiple 3D polygon objects.
A.44 FANTASY SLIDESHOW: Spectrum 512 pictures on fantasy theme (over 16's only).
A.35 IMG UTILITIES: Convert Degas, Neo, Spectrum Mac and Tny files to IMG

clip art

(Where PCX and IMG formats are offered you must state which you require)
A.110 CHILDREN (3 disks/£4.50 PCX/IMG): Over 90 quality clip art images of babies and children. ***NEW***
A.103 OFFICE CLIP ART: 33 IMG or PCX images of office related items.
A.107 HANDS CLIP ART: Over 70 IMG images of hands: pointing, waving, writing etc
A.100 ANIMALS CLIP ART (5 disks/£7.50): Over 170 IMG or PCX images of animals.
A.101 ASTROLOGY CLIP ART (3 disks/£4.50): 36 IMG or PCX images of zodiac signs.
A.102 SPACE CLIP ART: 38 images of the final frontier in PCX or IMG format.
A.106 CHRISTMAS CLIP ART (3 disks/£4.50): Over 150 images in PCX or IMG.
L.26, L.27, L.28 TYPE WRITE CLIP ART: 4 disk sets of quality clip art in IMG format. (£10.00 per set).

music

S.160 GUITAR REFERENCE: Useful program for anyone learning or playing.
S.4 YAMAHA PSS: Patch editor and facility to print tablature music.
S.156 FINAL SCORE: A music score printing program (mono only)
S.144 EKSEQ 1: A 100 track, 240ppqn sequencer with many features.
S.145 OPTRONIX MUZAK: Rip and play music from other programs.
S.8 NOISETRACKER: Soundtracker .MOD player with eight starter tunes.
S.7 ACCOMPANIAST: 16 Voice Henry Cosh sequencer (full instructions on disk).
S.19 ALCHIMIE JR: Impressive Swiss multi-window, multi-task sequencer (1Mb).
S.158 SWEET 16 LITE: An easy way into MIDI sequencing.

utilities

S.160 GUITAR REFERENCE: Useful program for anyone learning or playing.
U.88 CD PLAYER: Audio CD player for ST or Falcon.
U.86 BLITZSCHNELL (S/W): A hard drive defragmenter and optimizer from Germany.
U.80 ZORG: A 'Disk Doctor' type organiser.
U.77 THING: Alternative desktop (1Mb).
L.111 SUPER HACKER: Replace a picture in almost any game or demo with your own! (£3.00).
U.67 ST TOOLS: An exhaustive collection of Atari ST utilities.
U.53 TERADESK V1.36: Replacement desktop for the ST/STE (1Mb).
U.20 FASTCOPY 3: Excellent disk copier for cover disks.
U.48 PREMIER PACKERS: 13 of the best program packers, plus a de-packer.
U.42 PICTURE HUNTER: Rips picture screens from other programs.
U.47 PROBE ST: Handy utility. Grabs music/graphics, disk/memory editor, etc.
U.52 VAULT & TURTLE: Fast hard disk back-up utilities.

BIO HAZARD II

Originally marketed at £19.95
Now available form L.A.P.D. Licenceware
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Equipped with the latest in hi-tech weaponry, your task is to battle it out with your team of Marine Corps against the insidious Xenomorph menace which has infested every corner of the known galaxy. This is a turn-based strategy game for the Atari ST, STE and Falcon series of computers.
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A classic fantasy adventure set in the mythical world of Evander. After coming ashore in a busy harbour on the continent of Angara you set out ot find adventure and fortune. On the way you will meet engaging and enigmatic characters along with the odd mythical creature. Order Craghaven (disk L.112) for **£2.50** and get

'Escape!'

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miscellaneous

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M.199 COSMOLOGISTS' EQUATIONS: Calculate age of universe, etc. Experts only! ***NEW***
L.145 SIX PACK (£3.00): Weight and measure converter, financial future planner, useful formulas, etc. ***NEW***
M.196 MAGIC NUMBERS: Polygon regression and cluster analysis.
M.189 NATIONAL LOTTERY SIMULATOR: The fun way to pick your numbers. (1Mb, 2 disks/£3.00).
M.177 LOTTERY COMPANION: Valued statistical assistance with your lottery entries.
L.134 FILM DIRECTOR ELITE: Multi-media language system - from slideshows to packages (2 disks/£4.95).
M.194 ROLL IT: Selects lottery numbers randomly and calculates chances of winning a prize.
M.193 OUT OF THIS WORLD: A 'fun' typing tutor - type the tumbling letters before they crash.
M.183 HOUSE EXPENSE MANAGER: Daily household expense management program.
L.103 LEXICON: The ideal program for word game fanatics. Solve crosswords, anagrams etc (£3.00).
L.111 SUPER-HACKER: Put your own picture into demos, games etc. (£3.00)
M.146 AWARD MAKER: Design and print awards certificates.
M.155 ROUTE FINDER: Route finding program for England, Wales and Scotland.
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M.19 AIR WARRIOR: Flight sim with World War II aircraft.
L.17 ADDRESS BOOK: Neat and easy to use database for names and addresses (£2.50).
L.18 CIRCUIT: Easy to use electrical circuit diagram producing program (£2.50).
M.93 STITCH MATRIX: Pattern making program for knitting machines.
M.77 THE BIBLE: King James authorised version (3 disks/£4.50).
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M.100 GERMAN TRANSLATORS: Three programs to translate German text to English.
M.26 GENEALOGY: Two programs for the family historians to trace their forebears.
M.5 YOUR SECOND ATARI ST MANUAL: Text files to supplement the official manual.
M.17 WORD PUZZLE: Stuck with word games? Then this disk may help.
M.30 EXTRA WORD LIST: 70,000 extra words to use with disk M17.
M.111 NORTHERN & EQUATORIAL STAR ATLAS: Superb serious astronomy program S/W.
M.1 PLANETARIUM: Excellent, easy to use, astronomy program.
M.173 THE BIBLE: Complete King James, Old and New Testaments (3 disks/£4.50).
L. 89 GOLF: Database for the golfing sports-person. (£3.00)

programming

P.57 68000 PROGRAMMERS INTRO TO DEMO TECHNIQUES: Set of help documents.
U.85 EXTRA v3.21 (S/W): A powerful extension for the STOS language. 60 + extra commands.
F.53 STOSTESTERONE: A magazine disk devoted to programming STOS on the STE (issues 1 to 3 available).
P.53 IMAGINARY WORLD: Easy to use language to write your own role-play adventures.
U.76 LIBRARY CREATOR: An essential tool for GFA programmers to construct a single file.
P.55 STOS CYBER EXTENSION: An extension to the STOS programming language.
P.44 GFA V.2: Full version of language with tutorial & compiler! (N.B this disk is not PD - L.A.P.D. have permission to distribute it.)
DSP.1 SOZOBON C: A complete C compiler with documentation.
P.24 MENU-MAKER: Make your own menus with music, sprite and scrolling message.
P.33 ZX SPECTRUM EMULATOR: Emulate the old Speccy on your ST/STE (1Mb).
P.17 68000 PROGRAMMING COURSE: 10 'How to do it' document files.
P.19 GFA EXPERT: Massive text file and hellp routines for GFA-Basic 3.0
P.16 C ADVENTURE TOOL KIT: Write professional quality adventrues in C.

business

M.182 ST DIARY: A computer diary for the busy executive.
W.25 EASY TEXT: Easy desktop publishing program.
W.21 MARCEL: Super word processor with built in spell checker.
M.106 ACCOUNT-ABILITY: Fully featured accounts program. 10 accounts, 2,000 transactions!
M.148 INVOICE MASTER: Excellent invoicing system for small businesses.
M.13 OPUS 2000: A superb spreadsheet program (1Mb).
M.83 INVENTORY PRO: A stock control system.
U.23 DOUBLE SENTRY: Impressive accounts package for the small company
U.33 FAST BASE: A powerful and flexible database.
W.3 FIRST WORD: Word processor that set the standard for others to follow.
W.24 GDOS FONTS: A large assortment of fonts (2 disks/£3.00).

educational

L.144 TEACH YOURSELF (£3.00): Geography tutor for UK, Eire, Africa & USA ***NEW***
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M.186 KIDZ EDUCATIONAL: Nine learning programs for youngsters.
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G.266 WITCHES, MICE & FAIRY TALES: Games for younger users.
G.83 NOAH'S ARK: Collect the animals, two by two - addictive for adults too!
M.95 ABOUT THE HOUSE: Excellent collection of programs for young children.
M.28 KIDZ EDUCATIONAL: Alphabet, Maths Test, Numerical-Go-Round & Number Maze.
M.37 KIDZ DISK #1: Colouring Book, Spell Pic, Word Pic and Flash Card.
M.42 KIDZ DISK #2: Dot to Dot, Keyboard Capers & Matching.
M.67 BODY SHOP: Graphic quiz-type human anatomy tutor.
M.104 SOLAR SYSTEM GEOGRAPHY: Effects of the sun & moon on tides, seasons, etc.
M.16 KIDZ COMPILATION: Kid Graph, Grid, Music, Notes, Piano, Publisher, sketch and story.. all on one disk!
PRO.26 EARLY LEARNING MATHS 1: A collection of teaching programs for youngsters
PRO.27 EARLY LEARNING MATHS 2: A collection of teaching programs by Philip Rankin for 9 to12 years.
L.01 ROBOT MATHS: Maths tutor for children aged 6+ (£2.95).
L.02 MOON LETTERS: Spelling game for ages 5+ (£2.95).
L.04 ROBOT WORDS: Hangman in a modern format (£2.95).
L.08 ALL BLOCKED UP: Mathematical puzzles for the young (£2.95).
L.10 DROP DOWN WORDS: Spelling/memory game for youngsters (£2.95).
L.12 MATHS FUN: Maths for children 4 to 7 years (£2.95).
M.153 WORLD WAR II: Home front study pack for Sec. school work (3 disks/£4.50).
M.7 HISTORY FILE: Investigate a historical murder in Scotland (3 disks/£4.50).
M.86 DEATH OF A PRESIDENT: Investigate the Kennedy assassination (3 disks/£4.50).
M.114 FRANGLAIS 3 & 4: French language tutor programs.
M.123 C.I.A. WORLD FACTBOOK: Facts and figures on countries (4 disks/£6.00).
W.22 HOMEWORK: A word processor for the younger user.

communications

C.27 OASIS: Complete replacement for KA9Q internet software.
C.28 INTERNET ACCESS PACK: WWW access for the Atari.
C.25 JUNIOR OFFICE: Fax software for Class 2 modems (best with hard drive).
L.113 BBS DIRECTORY: Money saving directory of UK BBS's (£5.00).
C.22 TEDDYTERM: A superb multi-function communications program.
C.7 VANTERM V4: Excellent multi-function communications program.
M.138 MORSE CODE TUTOR: Practice and perfect your skills.
C.24 OFF-LINE READERS: Four off-line reader programs.

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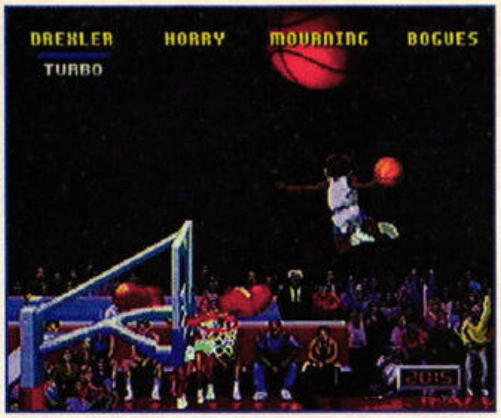
ISSUE 86 ■ SEPT 1996

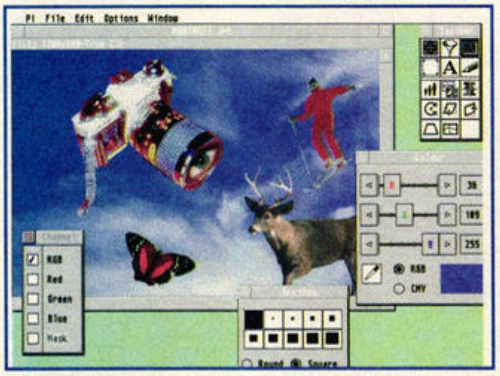
ST FORMAT



Does *NBA Jam TE* warrant it's £60 price tag? See page 26.

REVIEWS

18 POSITIVE IMAGE
It's finally here – the first dedicated image processor for the ST and Falcon. Discover whether it has lived up to the months of hype.



It's been a long time coming, but *Positive Image* has finally surfaced on the Atari. Find out more on page 18.

20 ARABESQUE
Titan takes up the reigns of Gribnif's software collection, and we ask how well *Arabesque* has aged.

21 CONVECTOR PRO
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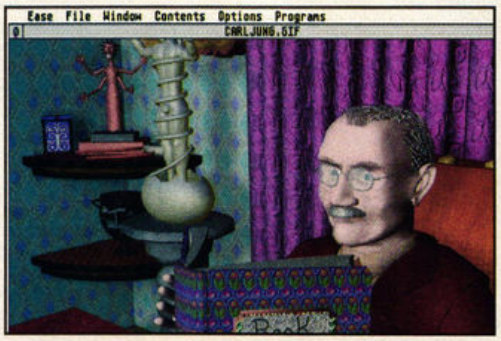
22 NEODESK/GENEVA BUNDLE
Revolutionise your computing life with this multitasking operating system and user-friendly replacement Desktop.

23 MISSION 1 CD-ROM
Suit up, strap in and take off as yet another software collection moves on to a shiny silver CD-ROM.



Does the Atari world really need another CD-ROM-based shareware collection? Whatever you think, check out page 23.

24 SPICE
One of the all-time classic games gets another update for the 1990s. Yes, it's *Defender* on the Falcon.

25 CONQUEST OF ELYSIUM
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25 BIO HAZARD 2
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26 NBA JAM TOURNAMENT EDITION
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Frank Charlton and Mac Marsden mop your brow and cure your ailing ST.

40 THE SCORE
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44 READER OFFERS
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50 FEEDBACK
Competition winners, letters and a gratuitous picture of a semi-naked man. Just what is going on?

50 NEXT MONTH
Well, *ST FORMAT* won't be around next month, but there are plenty of reasons why you should stick with the ST. Just read the magazine to find out!

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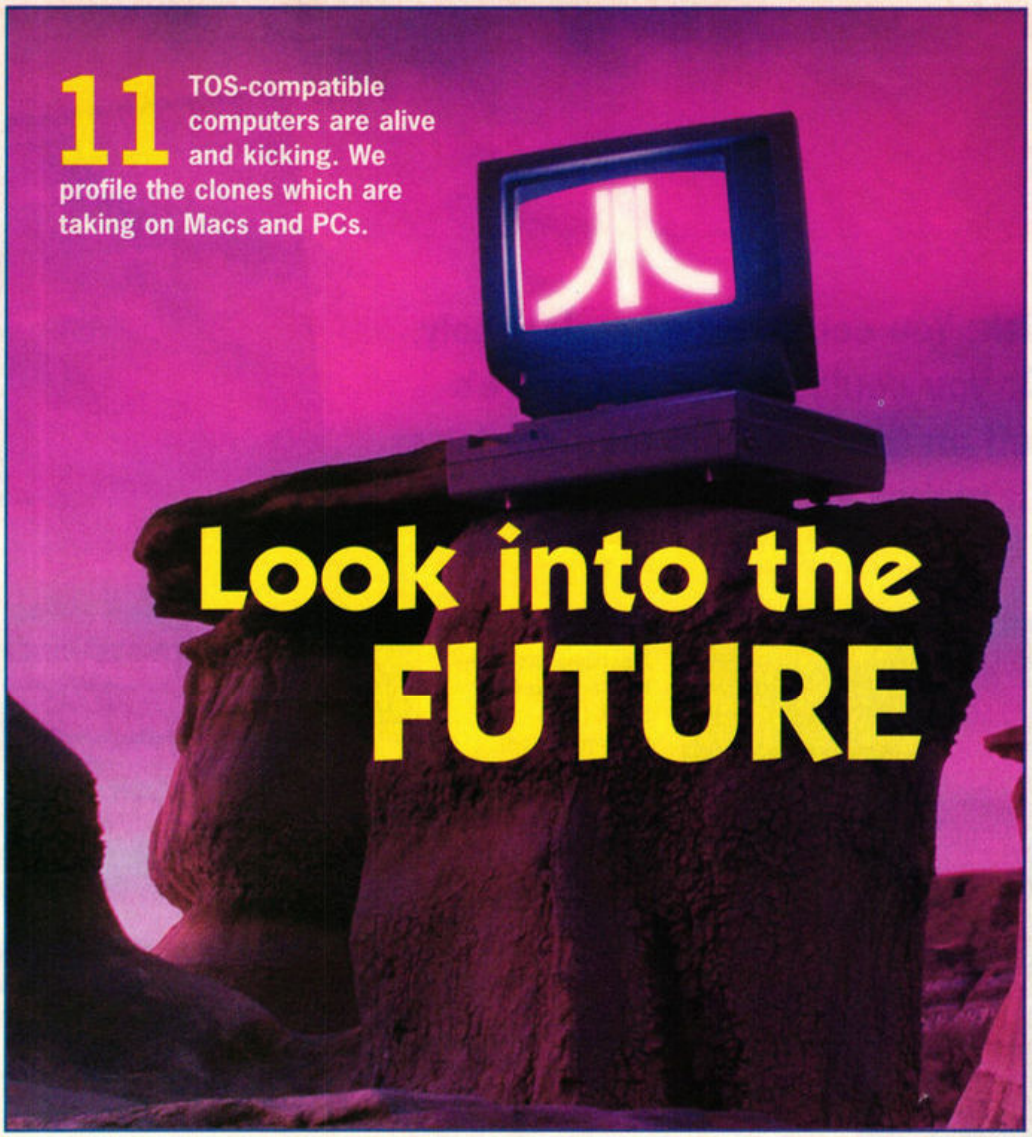

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38 ABSOLUTE BEGINNERS
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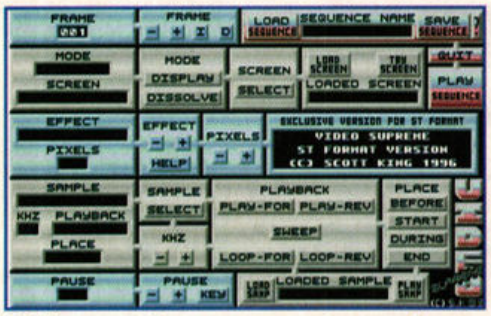
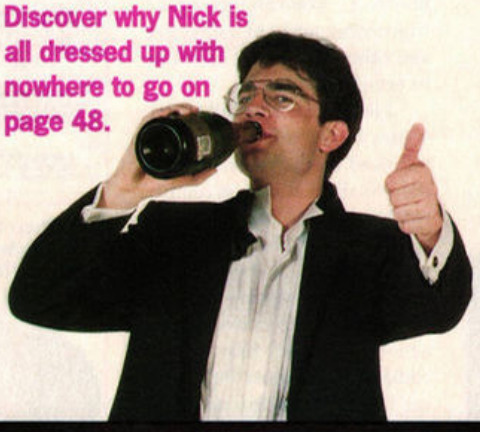


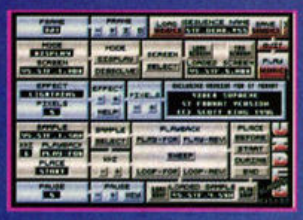
Add smart title sequences to your home movies – we show you how on page 30.

Discover why Nick is all dressed up with nowhere to go on page 48.



COVER DISK 86

THIS MONTH...



VIDEO SUPREME: Exclusive version of this superb video titling software. All Ataris. Uncompressed size: 213K

B SQUAD: Top-down strategy action game set in space. All Ataris, 1Mb. Uncompressed size: 382K

ST GUIDE 1.4E: Special *ST FORMAT* edition of the de facto on-line hypertext help guide. All Ataris. Uncompressed size: 230K

SELECTRIC 1.10E: Replace Atari's standard (and annoying) file selector with this unbeatable alternative. All Ataris. Uncompressed size: 188K

STD CODES CPX: Locate any UK dialling code with this superb CPX. All Ataris, *ZControl* required. Uncompressed size: 108K

MAXIDISK 2.2: Complete RAM disk program, with utilities. All Ataris. Uncompressed size: 87K

DIRSORT 1.1: Re-sort your Auto folder to get the programs running correctly. All Ataris. Size: 17K

ACC 1.3: Store your Accessories neatly in a folder. All Ataris. Size: 2K

TOYS: Small, perfectly formed *PacMan* game. Falcon, not VGA. Size: 5K

CUBASE FILE: Accompanies The Score's IPS tutorial. Uncompressed size: 47K

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This magazine came from Future Publishing, a company founded just ten years ago but now selling more computer magazines than any other publisher in Britain.

A few words about what was the world's best-selling ST mag:
ST FORMAT existed to give you all the information you needed to get the most out of your ST, STE, Falcon and Jaguar. Our advice was reliable, easy-to-follow and honest, and unlike other magazines, *ST FORMAT* was completely independent, so we said what we really thought. That, we believe, is why more ST owners chose *ST FORMAT* than any other ST magazine: we were the best-selling magazine, because we were the best.
All our features, tutorials and news stories were written by experts. Our reviews offered crystal clear buying recommendations and information – how much something cost, what it did, how well it did it and whether you should have bought it. And we always looked at the price – we understood you were spending your own money, not waving a fat corporate cheque book.

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Cover Disk

The final Cover Disk. You could get all melancholy, like Nick Peers. Or you could realise that there's some storming stuff on there. Go on, take the latter option. You know it makes sense.

B SQUAD

"Right troops. Spread out. First one to find the coffee machine, holler."

Click on the '?' icon to reveal information about your location or any interesting objects you might find.

By: Richard Hansell
Machines: All Ataris
Memory required: 1Mb
Resolution: ST low
Uncompressed size: 382K

This month's main game gives you the opportunity to storm a spaceship and kill yet more innocent, peace-loving aliens.

Loadsa violence

B Squad is quite similar to *Bio Hazard 2* (reviewed on page 25) but has enough original features to make it a challenging and addictive game in its own right. The plot is simple: you come across a deserted ship and discover it has been infested by aliens. The ultimate aim is to get from the airlock at the bottom of the ship to the bridge at the top. There you'll find the queen, who has to be killed.

You control six characters of varying strengths and personalities. You're up against a variety of aliens, ranging from simple grubs that cause minor damage through to warriors and the queen herself. All is not lost, however – you can pick up a frightening array of weaponry and other equipment en route to even the odds.

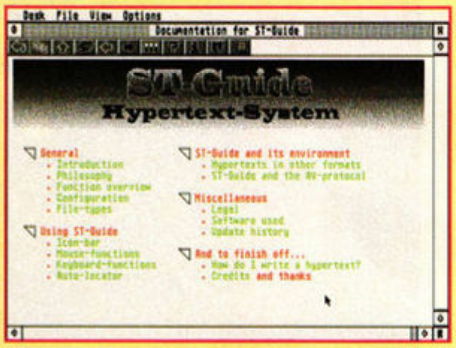
Like *Bio Hazard 2*, *B Squad* is turn based. You go first, followed by the aliens and then finally a turn is given to random events, such as doors jamming shut and so on. Each of your squad can be moved a set number of squares per turn, or made to perform an action. Once your moves are complete, you must wait to see how your enemy reacts to your moves.

It's a good idea to study the README.TXT file, carefully. *B Squad* is shareware, so cough up the paltry £3 fee.

Use the map to keep tabs on everyone, and don't forget to be standing by the airlock at 4.30 – that's when the bus leaves.

ST GUIDE 1.4E

By: Holger Weets
Machines: All Ataris
Memory required: 512K (1Mb recommended)
Resolution: any except ST low
Uncompressed size: 230K



ST Guide just gets better with each release, and it's easily the de facto help system for the Atari.

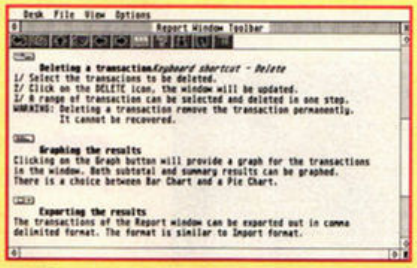
On-line help means you can start using your programs straight away without having to wade through text files first. *ST Guide* is the standard hypertext on-line help system for the Atari and enables you to find the help you need quickly and easily.

Help me!

ST Guide is installed as an Accessory, making it accessible from within any GEM program. If that program supports it, you can often get directly to the help you need just by pressing a key.

Each hypertext file consists of a number of links, all duplicated in a contents page and index for easy reference. Clicking on any link takes you directly to the information you require, so you don't have to wade through an entire text file looking for the section you need. Experiment with *ST Guide's* own documentation – it's that easy!

ST Guide is fairware, and is constantly evolving. The latest version has icons for the various options to make them even more accessible. You can register it in the UK – see SUPPORT.TXT for details. This version is exclusive to the *ST FORMAT* Cover Disk – don't distribute it elsewhere. See README.TXT.



Recent Cover Disk programs which take advantage of *ST Guide* include *MenuInfo* (*STF* 78), *CAB* (78 and 81), *PHEM 2* (84) and *ZControl* (85).

VIDEO SUPREME

Video Supreme is this month's exclusive biggie, and it's so storming we've decided to devote three whole pages to it. If you want to get going with the program, scoot along to page 30 now, you young scamp! It runs on all Ataris by the way.

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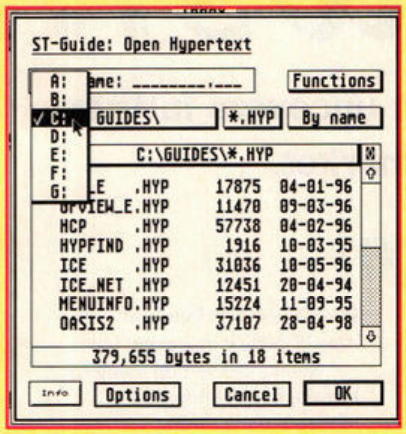
ISLAND STRIKE

Tony Greenwood, author of last month's Cover Disk game *Island Strike*, has thoughtfully provided a useful cheat. When playing, press [Space] to access the game statistics screen, then pull your joystick back and press [Fire].

This will bring up a new cheat menu which enables you to switch the ground fire off, gain extra fuel and enjoy other bonuses. You couldn't ask for more really.

SELECTRIC 1.10E



Selectric features include easy access to frequently used folders plus a number of file utilities.

By: Stefan Radermacher
Machines: All Ataris
Memory required: 512K
Resolution: Any
Uncompressed size: 188K

Selectric is one of those essential software upgrades. It replaces the standard GEM file selector and it won't be long before you realise you don't want to use your ST without it installed.

Point and click

Your file selector comes into play every time a GEM program asks you to load a file in from disk. The standard GEM file selector is best described as dodgy, especially on older STs.

There are plenty of replacements around, but none come close to *Selectric*. Put simply, it makes the whole process a breeze. Anyone with a copy of issue 69 can backtrack there to discover how it all works.

If you don't have a copy of that issue, don't worry. *Selectric* comes with comprehensive documentation and is quite easy to get around. Take some time to click on the many pop-up menus to discover exactly what it can do for you. It's shareware, so don't forget to register (through Cyber-STrider) when you discover how indispensable it is.

AND THERE'S MORE!

Once again we've crammed on too much stuff to be able to look at it all in detail. Never mind, these programs are all straightforward to use. Just make sure you read the documentation carefully.

STD-Code: This rather useful CPX enables you to locate a telephone directory just by entering the number. For example, inputting 01225 would reveal Bath as the telephone exchange, whereas entering Temple Cloud would give you the number 01761. Requires *ZControl* from last month's disk.

Just copy STDCODE.TOS to your CPXs folder and double-click on it to dearchive the contents. Then delete STDCODE.TOS.

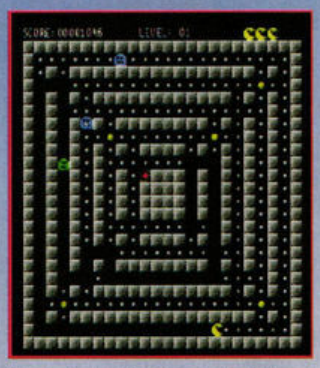
ACC 1.3: This utility is superb for tidying away your Accessories. Instead of having them floating around your boot disk or drive, you can store them neatly in a folder called ACC.

DirSort 1.1: Sort all the files into a particular running order. Perfect for your Auto folder (after installing ACC, for example).

Toys: This tiny *Pacman* clone is Falcon only, and doesn't run on VGA monitors. But it's damn fine all the same, and only 4K in size!

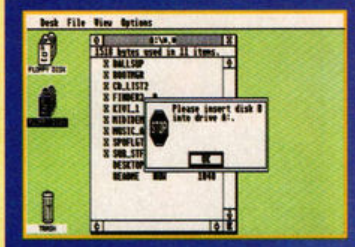
MaxiDisk 2.2: The full archive, including a set of utilities to accompany page 39's tutorial. Just dearchive MAXIDISK.TOS to your blank disk.

IPS Demo: Special file to accompany The Score – see page 40 for full details.

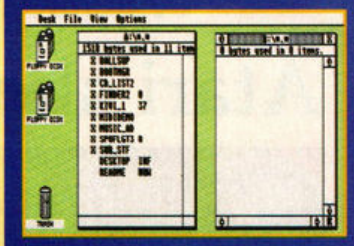


Small, sharp, but still a classic. How does one survive the rigours of *Toys?*

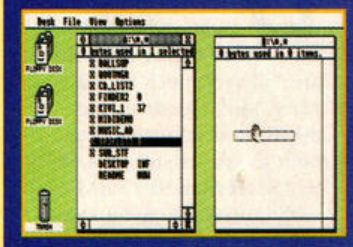
START HERE!



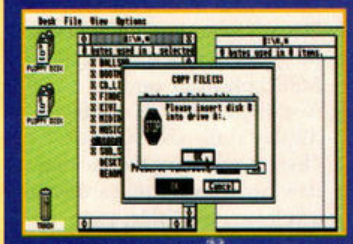
1 Assuming you have a single-drive system, insert your Cover Disk back-up into the disk drive. Double-click on the drive A icon to access it. Next, double-click on the drive B icon.



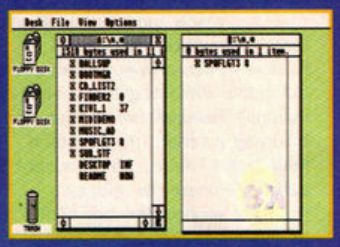
2 When prompted, remove the Cover Disk and insert your blank disk into the disk drive. Click on OK and a separate window should appear with the contents of the disk within it.



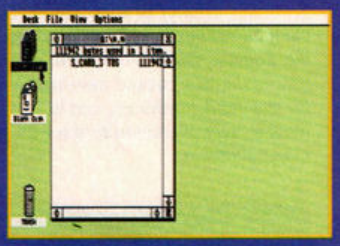
3 Next, click and hold down the left mouse button on the file or folder you wish to copy across to your blank disk. Drag the file over to the drive B window before releasing the button.



4 An alert box will tell you to insert disk A (your Cover Disk) into the disk drive. Do so, click on OK and follow the on-screen instructions.



5 Just follow the instructions on the screen until the file or folder you wished to copy has been transferred. It'll be displayed in drive B's window. Now you're ready to dearchive your software.



6 Re-boot your ST with your blank disk in the disk drive and double-click on the drive A icon to open up its contents.

7 Double-click on the TOS file to begin decompressing it. A list of files will be displayed as they are decompressed. You'll then be asked to press any key.

8 The relevant folders and files should now appear in drive A's window. To free up more disk space, drag the TOS file over the trashcan icon to delete it.

PROBLEMS?

- Write-protect your Cover Disk. Slide the black tab so you can see through the hole.
- Make a backup using the *Back Up* program. Never run anything except *Back Up* directly from the Cover Disk.
- If you have an old STFM and can't read the Cover Disk, you need to upgrade to a double-sided drive.
- If you are having problems with a Cover Disk program, re-read the instructions and any DOC files. If you still have problems, call the Cover Disk Hotline on ☎ 01225 442244 on Wednesday afternoons between 2pm and 6pm only.
- If you can't load, copy or back up your Cover Disk, it may be faulty. Try calling our technical support line on ☎ 0891 715929 (weekdays 10am–12.30pm and 1.30pm–4.30pm). Calls cost 39p per minute cheap rate, 49p at all other times.
- Alternatively, send the disk, a padded self-addressed envelope and two stamps to: *ST FORMAT* September Disk Returns, Tib Plc, Tib House, 11 Edwards Street, Bradford BD4 7BH (if the disk is faulty we will refund the postage). Don't send faulty disks to our Bath or Somerton offices – we don't keep stocks of Cover Disks.
- If you have any other hardware or software queries, contact the publisher.

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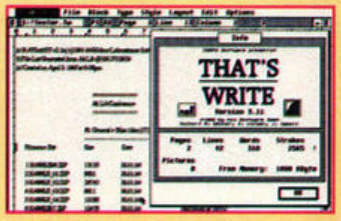
SNIPPETS

SToop, the Falcon-only boot manager which appeared on Wonder Disk 85, has been given a PD release. It was previously shareware, but author Phil Hodgkins is unable to continue development or support following a serious motherboard fault on his Falcon. Since he can't get at the source to release a freeware version, Phil has kindly provided a registration code everyone can use. Enter the name as Phil Hodgkins and use the code ndoazQnf to unlock the program.

German programming team No! Software, creator of Atari classics such as *Arabesque*, *Convector* and the popular *That's Write* word processor, has ceased development for the Atari machines, and is moving across instead to the PC's *OS/2* platform.



No! more versions of *That's Write* for the ST. There's No! justice.

A new user group has been launched in the south of England. The Wessex Atari Group will hold regular meetings, enabling members to stay in touch with fellow ST and Falcon users, and also hopes to produce newsletters and establish an on-line presence. For more information, contact Roy Goring on ☎ 01705 611847, or e-mail him at: roy@goring.demon.co.uk.

FaST Club has asked us to point out that it is the sole UK distributor for the range of Gemulator emulation hardware and software from Branch Always Software, as featured in last month's News. For more information and UK pricing, contact FaST Club on ☎ 0115 9455250.

DMC, the German developer behind the successful *Calamus*, *Calamus S* and *Calamus SL* series of desktop publishing programs, has apparently sold the rights to the Atari versions to Canadian company MGI. It is understood that MGI will continue to develop the Atari versions, while DMC will take on the *Windows 95* version for PCs.

Atari Entertainment is a printed amateur magazine for the Jaguar and Lynx consoles, available every two months. Subscriptions are currently £10 per year and you can get more information from: *Atari Entertainment*, PO Box 7, Riseley, Reading.

STF News...

Supersleuth Frank Charlton uncovers further evidence of a buoyant ST market.

Atari shows are go!

System Solutions

Despite the news that this will be the final issue of *ST FORMAT*, the two September Atari shows are still very much taking place. Mike Goodman has asked us to assure you that both shows are still on, and that apart from *ST FORMAT's* withdrawal (for obvious reasons), nothing has changed.

The exhibitors tell us there should be several exciting new projects and releases to inspect, and even more for you to spend your money on. HiSoft's Dave Woodhouse says work is progressing well on its Squirrel MPEG playback card – a working version should be on display at the shows. Titan Designs will have the exciting new Nemesis Falcon hardware accelerator available, and versions of *APEX 3* and the tantalising *APEX Audio* should be on display.

FaST Club will be showing off the new version of the classic *ST FORMAT* Gold-winning *ImageCopy*, as well as the improved versions of the Gemulator Atari emulator for the PC. System Solutions will have its usual excellent range of hardware and software on sale, including award-winning products such as *NVDI 4* and *Face Value*, plus new items such as the *Infopedia*.

The Upgrade Shop's Dave Escott will be exhibiting his new range of Cheetah hard drives, and the line-up is completed by Merlin, Goodman's International, The Console Centre, 16/32 Systems, The Calamus User Group, BeST Electronics, Top Byte and *AtariPhile* disk magazine.

Remember to pop along to Birmingham Motorcycle Museum on Saturday 28 September or the Osterley Four Pillars Hotel, Isleworth, Middlesex on Sunday 28 for what promise to be the best Atari shows ever. You may

AtariPhile By the FFF

even spot certain *ST FORMAT* people lurking about the stands at the Birmingham show, if you look carefully. For more information, contact Goodman's on ☎ 01782 335650.

END OF AN ERA

This is the final issue of *ST FORMAT*. After 86 issues and seven years of covering everything Atari, we're sadly closing our doors (see page 48). Don't be disheartened, though – there are loads of ways in which you can still keep up to date with what's happening in the world of the ST, Falcon and Jaguar, including disk magazines, bulletin boards, the Internet and via various software companies. You'll find more details throughout this issue.

Nick Peers, Editor

Titan on-line

Titan Designs has unveiled its new on-line presence, in the form of a suite of World Wide Web pages. The pages present a comprehensive catalogue of all Titan's products, from the stunning work of Black Scorpion Software through to the recently acquired Gribnif products *Geneva* and *NeoDesk*.

As well as being able to study the technical specs and pricing of all the products, you can see screen grabs of software in action and digital photos of hardware items such as Exposé and Nemesis. Titan is also expanding into the generic hardware market, and offers some excellent deals on modems, monitors, Falcon memory expansions and SyQuest removable drives.

The pages look smart and work well with *CAB*. Point your copy at: http://ourworld.compuserve.com/homepages/TITANWEB/.

For the latest Atari news, get on-line and check out the Titan Web site, among others.

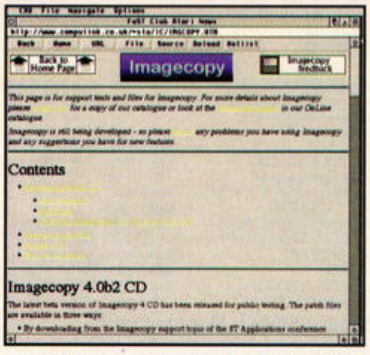
www.stformat.com

Go FaSTer...

FaST Club has pre-empted the late summer release of the new version of *ImageCopy*, Jeremy Hughes superlative image viewing, printing and manipulation program, by announcing that beta test versions are to be made available to registered *ImageCopy* owners.

You need a full version of *ImageCopy 4CD* to take part, because the betas are available as patch files. Users of the non-CD version of *ImageCopy 4* can upgrade by sending master disk 1 back with a cheque for £5. As well as increased support for older printers, the new *ImageCopy* adds a higher level of *MagiC* and *MagiCMac* support, 16-bit colour mode with the Crazy Dots graphics card and the ability to load and save custom palette files.

You can download the patch from the stapplications/imagecopy conference on CIX, or from FaST Club's Web site at http://www.compulink.co.uk/~sta/, or send a cheque for £2.50 to FaST Club, PO Box 101, Nottingham, NG2 7NN.



CAB users can download the new *ImageCopy* patches from FaST Club's Web site.

Floppyshop savings

Floppyshop's new Web site is almost ready. Log on to: http://www.netkonect.net/tachyon/flopshop/ for more details.

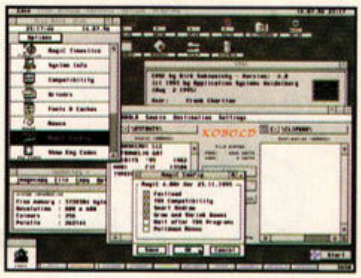
In time for the end of our laughable summer, Floppyshop has chopped prices on its massive range of PD disks. As from now, all PD software from Floppyshop's collection of over 3,200 ST/STE disks and 700 Falcon disks costs just £1.25 plus postage per disk. For a comprehensive catalogue, send one blank disk for the Falcon list, or two for the ST lists, to: Floppyshop, PO Box 273, Aberdeen, AB9 8SJ.

It has also discounted a number of commercial products for a limited period. *EZ-Art Pro* and *Easy Stitch* fall to £10, *Family Roots 2* is £15, *DegasArt 3* is £6 and *Positive Image* is still available at the pre-launch price of £65. Phone ☎ 01224 586208.

A kind of MagiC

Barely five minutes after *MagiC 4* finally surfaced in the UK, Canadian company Computer Direct published news about *MagiC 5* on its Web site at http://www.compdirect.com/. Quoting from Applications Systems Heidelberg – the MagiC developer – the page suggests that *MagiC 5*, *MagiCMac 2* and *Ease 5* will be released "later this year."

Without going into too much detail about what could be the most important Atari release of 1996, Computer Direct mentions that *MagiC 5* will include support for the long filenames currently enjoyed by Windows 95 and Macintosh users – thereby eliminating one TOS's most annoying features. *MagiC* is already established as one of the most efficient operating systems – *MagiCMac* provides full pre-emptive multitasking, something even *MacOS* can't do without a PowerPC chip – and this new version certainly sounds exciting.



***MagiC 4* is a full-blown pre-emptive multitasking replacement for TOS. *MagiC 5*, which might be out before Christmas, should be even better.**

UK distribution should be by System Solutions (☎ 0181 6933355) although as yet it has no concrete information on any of the products mentioned.

That's Neat

Along with its range of CD-Writer drives and Falcon software, System Solutions is distributing a system for creating printed labels for your own CD-ROMs. The Neato kit includes everything you need to create smart stick-on labels using your existing printer, including software templates and 100 labels.

Aimed primarily at musicians and bands using software such as *Cubase Audio* or *AudioTracker* to produce their own red-book-standard audio CDs using System Solutions hardware, the kit is simple and effective. Additional packs of 300 labels are also available.

For more information, call System Solutions on ☎ 0181 6933355.

Beavis voice: "Huhuhuhuh! That's neat!" Butthead voice: "No, that's Neato – funny little sticky things."

SNIPPETS

Mike Goodman is exploring the possibility of printing a bi-monthly *Atari News Update* magazine. You can register your interest by sending a SAE to: Goodman's International, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent, Staffs, ST3 1SW.

If you're thinking of running a BBS and have at least 2Mb fitted to your ST, you should investigate *Foresight*, a new Bulletin Board system written in *GFA Basic*. *Foresight* is 'donationware', so you only have to pay what you can afford. You can pick up the 'wide beta' version via the Internet from the ftp site at: ftp.cnam.fr. Change into the /pub/Atari/Telecomm directory and look for fs_wideb.zip.

Continuing the saga of the cheap Jaguar hardware and software, a spokesperson at the UK offices of JTS Atari told us that the sudden appearance of bargain bin items was nothing to do with the company. It suspects a large retail chain has offloaded stock to a number of stores, including Beatties and Electronics Boutique.

Current Internet rumours state that Atari is poised to make a statement about the end of Jaguar development. It has also been suggested that no further releases will take place. JTS Atari UK told us that it expects to hear from the USA HQ "soon" on this matter, but would make no further comment. We also hear that longtime employee Alistair Bodin has left the Slough offices for pastures new, following the recent departure of Darryl Still. Is this the story of the ST, Falcon and Lynx all over again?

Garfield Smith's Atari Internet Guide is another set of Web pages for the ST. The site is still being constructed, but the pages look like a labour of love and include sections on *STiK*, *Oasis* and *MiNTNet* connectivity. With files to download and an automatic system which can notify you when new versions of the program are released, it looks as if this could be a useful site to bookmark.

Australian Atari owners worried about being left in the cold with the closure of *ST FORMAT* can contact the Melbourne Atari Computer Enthusiasts at: PO Box 340, Rosanna, Victoria, 3084, Australia. Alternatively, e-mail ghurford@melbourne.dialix.oz.au for more information about the group.

Subscribers to *ST FORMAT* should not worry about unfinished subs. We'll be contacting you shortly with a range of options.

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Epson LX80/86/90	2·12	1·97	1·77	1·67
Mannesmann Tally 80/81	3·90	3·75	3·55	3·35
NEC Pinwriter P2200/P2+	3·03	2·88	2·68	2·48
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Star LC200	3·00	2·85	2·65	2·45
Star LC24 – 10/20/200	2·86	2·71	2·51	2·31
Star LC240C, LC24-30	7·75	7·60	7·40	7·20
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Star LC10/20/100	6·00	5·85	5·65	5·25
Star LC200	9·78	9·63	9·43	9·03
Star LC24 – 10/20/200	9·63	9·48	9·28	8·88
Star LC240C, LC24-30	9·20	9·05	8·85	8·45

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HP Deskjet 600/660C Black	26·50	26·15	25·75
HP Deskjet 600/660C Tri-Colour	28·50	28·15	27·75
HP Deskjet 850C Black	26·00	25·65	25·25
HP Deskjet 850C Tri-Colour	25·00	24·65	24·25
HP Thinkjet/Quietjet	12·13	11·93	11·63
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Summer Specials from Floppyshop

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THE image processing and retouching package for Atari computers. Retouch 24-bit True Colour graphics on an ordinary ST without loss of image quality. Print out your masterpiece to almost any printer (including colour). Positive Image is brimming with features, many of which are a first on Atari computers. What's more, it's under continuous development. Package includes enhanced version for TT and Falcon users. Fully compatible with all graphic cards, it even runs on PCs and Macs under any of the available ST emulators! Introductory price £65 (normal price £79) plus P&P (£2 UK, £5 Europe, £10 rest of world). Minimum Requirements: 1 megabyte.

EZ-Art Professional

Is the leading paint package for the Atari ST. It offers a fast friendly icon driven interface with a vast array of drawing tools and block manipulation facilities. Supports the use of up to 10 workscreens, makes use of the STE's extended palette (even on an STFM!), allows multiple fonts and has lots of special FX. Complete with a fully illustrated 60 page manual. It even runs on a 520! Summer Special just £10 (normally £19.95) plus P&P (£1 UK, £2 Europe, £3 rest of world).

Family Roots II

The leading genealogy package for Atari computers. Currently in use by hundreds of Atari users worldwide. Features a nice easy to use graphical interface where you create individuals by placing blocks on a grid and link them up with each other using a few simple mouse clicks. Includes easy access to each individual's database record and a powerful search facility. Supports printout of both the individual database entries and the graphical tree structure. Summer Special Price just £15 (normally £24.95) plus P&P (£1 UK, £2 Europe, £3 rest of world).

Easy Stitch

Allows you to design your own cross stitch patterns. These can be created from scratch or existing graphics may be imported. Easy Stitch allows you to generate patterns of any size up to a maximum of 10 feet by 8 feet! Using a grid, the pattern is designed on screen. Areas can be easily copied, rotated, reduced or enlarged. You can even edit individual stitches! Summer Special Price just £10 (normal price £19.95) plus P&P (£1 UK, £2 Europe, £3 rest of world).

Other Products

Easy Text Professional – DTP package, needs 1 Mb
Easy Text Pro Vector – DTP package, needs SpeedoGDOS or NVDI 3/4 plus 2.5 Mb
Either of the above for just £19.95 plus P&P (UK Free, Europe £3, rest of world £5)
Masterplan (Lotus 1-2-3 compatible spreadsheet with graphing) – originally sold for around £90 – now just £12.00 plus P&P (UK £1, Europe £2, rest of world £3)

What else do we do at Floppyshop?

Quite a lot actually! We run one of the largest and longest established Shareware libraries in the world, offering a fast and efficient service on the newest releases. If we don't have what you want, it probably doesn't exist! We are also continuing to develop new commercial titles for Atari computers because we KNOW there is still a flourishing market for top quality products. Whatever your Atari software needs are, it's highly likely that Floppyshop can satisfy them. Here's a few (we could think of many more) reasons why you should buy from Floppyshop:

- Established in 1987 we have a proven track record second to none.
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Look into the FUTURE

The year is 1996. Atari has departed, and our last, best hope is the TOS-compatible clones. Frank Charlton warps in and wonders.

Right through its history, Atari has tended to give up on its machines long before they're past their best. The ST, TT, Falcon and Mega Series were all abandoned, and now it looks as if the Jaguar is set to follow suit.

But what if you've resolutely stuck with the Atari platform since the ST was launched? Chances are you'll have spent a lot of money upgrading your system over the years. You may be able to carry on using generic peripherals such as hard drives and modems if you decide to make the leap to PC or Mac computers, but what if you've spent a fortune on Atari-specific software?

Think of the years you've invested in mastering expensive packages such as *Calamus*. You may have megabytes of files and templates specific to one package, and moving to another platform would involve gradually learning it all over again, converting your work as you go. What if you're a musician, using your ST as the foundation of a perfectly capable MIDI studio, or basing a digital recording setup around a Falcon? Do you spend thousands on new hardware and software? Premier music packages such as *Cubase VST* don't come cheap.

If only Atari hadn't given up on computers, there would probably be fast TOS-driven machines using current technology, capable of future expansion whenever you needed it. Crying over spilt milk doesn't help – Atari left long ago, and isn't likely to return to the ST. Something different is happening though: as in the PC and Mac markets, third-party companies have seen the promise of a new generation of ST- and Falcon-compatible computers, and they're going ahead with plans for machines far beyond the reach of Atari's original ST design.

These companies are filling the void left by Atari's early departure with custom-built machines based around the latest generation of Motorola microprocessors. If you're using an ST for professional DTP, you'll find machines which can take your familiar software to dizzying new heights of speed and colour. If you're using a Falcon to create graphics with rendering packages such as *NeoN* or producing animations with *APEX Media*, you'll see new machines capable of higher resolutions and greater expandability.

Over the next five pages, we'll be investigating what the future has to offer, thanks to these new clone machines. Do they live up to the hype, or are they throwing new technology at an old platform? Let's take a look...

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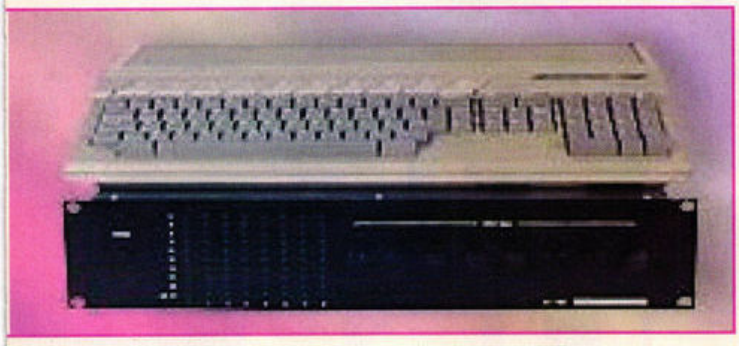
C-Lab Falcons

The only manufacturer sanctioned by Atari, C-Lab has advanced Falcon technology.

One of the last things Atari did before it abandoned the world of TOS computers forever was pave the way for future developments, in both hardware and software terms. In a move which pre-empted Apple's recent decision to license both the Macintosh's hardware design and operating system to other companies, Atari sold the licence to develop both the Falcon hardware and TOS itself. German company C-Lab, famous for powerful hardware and software such as *Notator Logic*, became the only official licensee on the Atari platform.

C-Lab's musical heritage means that the newer Falcon models are aimed at professional musicians and studios with reasonably generous budgets, but the C-Lab/Atari deal certainly shouldn't be dismissed out of hand by the rest of us. For starters, the arrival of the C-Lab badged Mk 1 machines means there's still a source of the basic Falcon hardware. If you're thinking of upgrading from an ST, or need a second machine – and don't want to take the secondhand route – the Mk 1 is probably your best option.

Second, it means that spare parts for existing Falcons are likely to remain available, because C-Lab will need to keep stocks on hand. Finally, Falcon technology isn't gathering dust. C-Lab is a well-respected company in the music world, and new machines are still being sold and used every day. This on-going support and development of the user base means we're far more likely to see new software appear, including programs which cater for non-musical needs.



Like the SP/DIF (above right), the Sunrise Electronics SE-800 can be had separately if you're happy with your existing Falcon setup.

Going up...

If you're looking to move up from your old 8MHz plain vanilla ST, the Mk 1 is certainly a good bet. You have the assurance of a quality name behind it, and the comfort of knowing that there's still support for the hardware. Your machine is guaranteed – not something you'll get with a secondhand Falcon.

The Soundpool SP/DIF interface is only one of several digital audio products which can be built into the Mk X's capacious new case.

If you're thinking of upgrading from an ST, C-Lab's Falcon Mk 1 is probably your best option

The next machine in the series, C-Lab's Mk 2, isn't really much of a step away from the original Atari design – see the Next Generation panel for information about the basic differences. Essentially, it's aimed at the budget end of the MIDI sequencing and digital recording market. It's not as expensive as the Mk X, but it corrects some fundamental flaws in Atari's hardware to produce a cleaner, more stable system for use in the musical environment.

If you're after a Falcon for general use and don't intend to make use of heavyweight digital audio software such as *Cubase Audio*, the Mk 2 isn't likely to appeal. Remember also that if you stick with an Atari Falcon, secondhand or otherwise, you can also have potential faults such as the SCSI problem rectified by System Solutions.

X marks the spot

And so, to the most radical redesign in the history of Atari-licensed machines: the new Mk X Falcon from C-Lab. Housed in a radical new case capable of holding extra drives, hardware accelerators and MIDI hardware, the Mk X is aimed very squarely at the high end of the digital recording market.

The Mk 2 was touted as a single-box

C-Lab's Mk 2 Falcon is aimed primarily at MIDI musicians and has been modified to facilitate direct-to-disk recording.

THE NEXT GENERATION

There are three basic Falcons available from C-Lab. It's important to get the one which best suits your needs, so here's a run-down of the differences between them.

Mk 1 The model most like the original Atari-badged Falcon is the C-Lab Falcon Mk 1. Basically, it's the Falcon we all know and love, cased in the familiar one-piece ST case design. It may not be a vast step forwards in terms of power or design, but it fulfils one important need: it's an entry-level TOS computer which doesn't break the bank, and is still being manufactured. If you're moving up from general ST usage, the Mk 1 is a good starting point.

Mk 2 Next is the Mk 2, which again, uses the same old ST case. The Mk 2 is primarily aimed at MIDI musicians though, and corrects some deficiencies and faults in the original Atari hardware design.

The internal IDE hard drive interface is gone, replaced instead with a faster SCSI connection. If you're using a Falcon for direct-to-disk (D2D) digital recording, IDE is too slow to be reliable. With an internal SCSI drive, you have an easily portable one-piece D2D solution without needing external drives.

A few hardware modifications – known generically as the '*Cubase* Modifications' – have been performed to correct problems with the original Falcon SCSI interface. Finally, tweaks to the digital audio subsystem include removal of the Falcon's 'bass boost' circuit and replacement of the underpowered analog-to-digital converter (which handles the digitising and playback of sampled sound) with a more efficient system.

Note that you can have an original Falcon modified in this way, too, if you don't want to buy a new machine. Contact System Solutions on ☎ 0181 6933355 for details.

Mk X Finally, the greatest leap away from the original Atari specifications occurs in the Falcon Mk X. Based around a more modern and expandable case design using a separate keyboard, the Mk X is very firmly aimed at musicians and sound engineers. It takes the specs of the improved Mk 2 and adds a professional design – check the Mk X Specifications panel (opposite) for more details.

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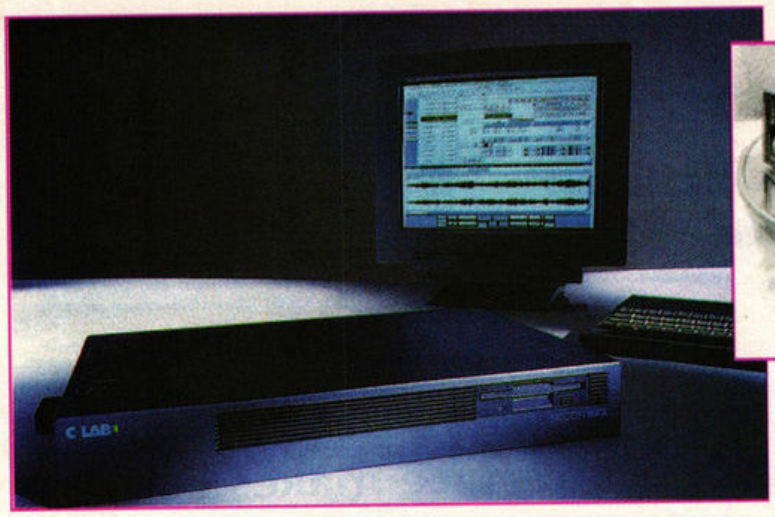
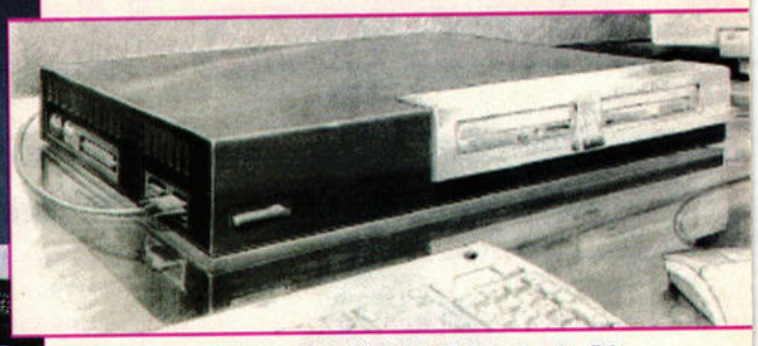


You can even build your standard Atari Falcon into one of these C-Lab Mk X cases, providing more room for hardware expansions such as the AfterBurner040 accelerator (see page 16).



C-Lab's original artist's impression of the Falcon Mk X case is only a little different from the final version.

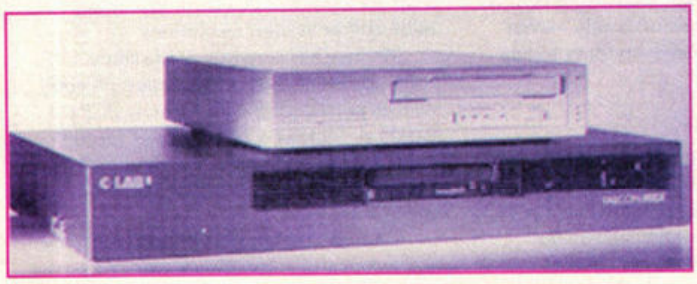
digital recording solution, because it comes with the necessary hardware and software already fitted and installed, but the Mk X is even closer to that goal. Extra hardware to provide digital interfaces and extra audio outputs can be added internally, so you end up with a very neat solution. By comparison, a Falcon in a standard case would look extremely cluttered by the time you'd added the requisite bits of hardware for a fully professional digital recording system. However, the Mk X case isn't the true 19-inch rack-mount favoured by studios, even though it may look like one.

So what of the future? We understand that C-Lab recruited a team of programmers to continue the development of TOS up to and beyond version 5. Sources from C-Lab now state that development was abandoned after only a few weeks, but no concrete reason was ever provided – perhaps they should have consulted with the programmers of *MagiC* instead, and considered licensing that system.

A clone too far

The C-Lab machines are the least adventurous of the Atari clones, and C-Lab has stated that it won't be doing any work on the original Atari Falcon motherboard itself. Shortly before the launch of the Mk X, the Internet abounded with rumours that it was in fact developing advanced Falcon clones utilising newer central processors such the 68040 used in the Medusa clones (covered overleaf). Sadly, it seems as if C-Lab is content to be the only source for new hardware based on Atari's original design.

ST FORMAT's opinion on the C-Lab Falcons falls somewhere in the middle of the road. It's great to see someone, somewhere, making new Atari computers, but it has to be said that C-Lab's pricing structure takes the machines well out of the 'average user' bracket. The Falcon Mk 2 was around £2,000 at launch, and we still haven't managed to ascertain the price of an 'average' Mk X system.



C-Lab deliberately chose a long, black and angular case to appeal to musicians. This is how most studio gear looks, so the Mk X will fit in nicely.

CONTACTS

C-Lab machines are distributed in the UK by Digital Media, ☎ 01422 340875.

System Solutions ☎ 0181 6933355
Titan Designs ☎ 0121 6936669
Sunrise Electronics ☎ 01379 853999

All the various tweaks, expansions and extras fitted to the C-Lab machines are available separately, too. Since most of it falls into the musical arena, companies such as System Solutions and Sunrise Electronics can provide everything you need to produce a comparable system. Both companies can provide alternative cases for your Falcon, and studio-quality rack-mount cases are available, too.

Non-musos who yearn to expand their Falcons and like the clean lines of the Mk X case design can turn to Titan Designs, which is handling the Mk X case upgrades. Prices weren't available as we went to press. We like the cases for general use – they're considerably more stylish than Atari's plastic monstrosities, and make it easier upgrade your system.

If you're a musician who uses a Falcon for music and little else, the C-Lab Falcons undoubtedly represent an attractive investment, with their trouble-free 'everything in a box' approach. For the rest of us, the bias towards musical hardware and the subsequently higher prices make standard Falcon hardware fitted with enhancements such as Titan's Afterburner (see page 16) or Nemesis, or System Solutions' BlowUp FX (*STF* 85, 95%) a much more financially viable proposition. The lack of real innovation sets the C-Labs apart from the other machines featured here, and it's a shame it didn't choose to take the hardware further.

They are undoubtedly an attractive investment, with their trouble-free 'everything in a box' approach

MK X SPECIFICATIONS

The C-Lab Falcon Mk X has a number of features common to all Falcon designs, such as TOS version and basic hardware design. The extra space in that snazzy new case means that quite a few new features can be added, either when you buy it or later on. Options include:

- SCSI or IDE internal drive of up to 2Gb.
- Removable SCSI drives, such as the Iomega ZIP and SyQuest EZ-135.
- Professional-quality analog-to-digital and digital-to-analog convertors for improved digital audio.
- Built-in digital interfaces compatible with the Sony/Philips Digital Interface Format (SP/DIF) for recording 16 channels of CD-quality audio direct from digital sources such as DAT or CD.
- Eight independent analog audio outputs using professional quality connections, previously only available with hardware such as Soundpool's FA-8.
- Optional ADAT interface for connection to digital mixers such as the Korg 148RC, providing a completely digital audio environment from recording through to mixing and final mastering.

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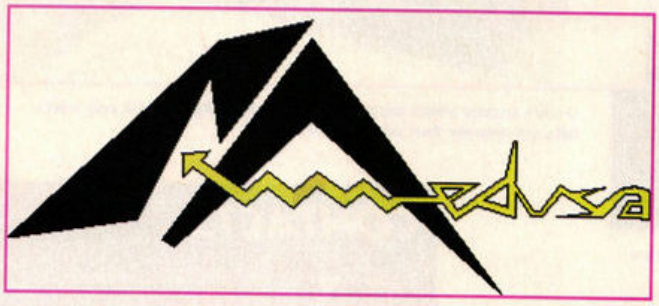
Medusa Hades

The most radical of the clones, the Hades will make the most jaded sceptic drool.



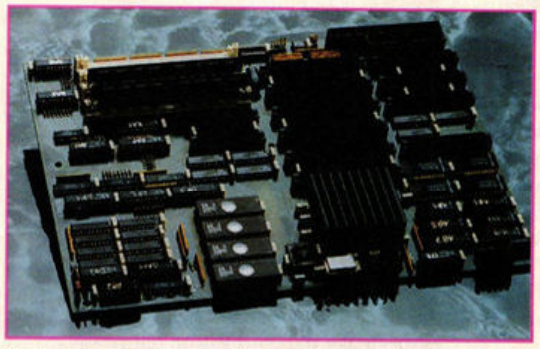
From little acorns... Switzerland's Medusa may be a small company, but it's producing some mightily impressive hardware.

We've seen already that existing Atari technology can be refined and improved without radically altering the hardware design itself, and without adding any particularly new or innovative features. The C-Lab Falcon clones are targeted specifically at professional musicians, but they aren't the only option. There are other new machines which use hardware design considerably more advanced than anything C-Lab or Atari have ever considered.

Medusa Computer Systems is a small outfit based in Switzerland, land of cuckoo clocks and wonderful chocolate. The company has concentrated on creating a completely new concept, producing high-end computers using cutting-edge technology, which just happen to have the nice bonus of being TOS compatible.

The Hades is Medusa's newest and most impressive design. As with all of the clones we're looking at, it is built around the familiar 68000 series of processors. Unlike the older models used in the ST and Falcon though, the Hades is capable of using the more advanced 68040 model, or even the 68060 – the final CPU in Motorola's series. The '060 is an extremely advanced chip, and is considered by Motorola to be the most advanced processor it could produce before it embarked on the RISC-based PowerPC chip series. It's so far away from the 68000 in terms of both design and performance that it's hard to believe it's part of the same family – even Apple hasn't used anything higher than the '040.

The Hades is capable of using the 68040, or even the 68060 – the final CPU in Motorola's series



The basic board design may look as drab as any other computer, but the specifications get the mouth watering.

PC what?

Medusa's most innovative idea was to include a comparatively new expansion system, known as the PCI bus. The PCI system allows for stupefyingly fast data transfer between peripherals, and is very much at the cutting edge of computer technology. It is being brought into daily use on the PC and Macintosh markets, and is more or less mandatory in high-spec machines. Apple itself recently junked its own designs in favour of PCI in new machines such as the PowerMac 7500.

Medusa's Hades uses a PCI bus for fast data transfer between peripherals and comes with a PC keyboard and Atari-compatible mouse.

The high speed makes it perfect for demanding hardware such as accelerated 24- and 32-bit graphics cards, as well as ultra-fast networking, SCSI and even digital-audio recording devices. With the right software drivers, the Hades could be host to any of these spectacular bits of kit via its four PCI slots.

Remember this

The basic Hades – if such a term can be applied to such a jaw-dropping piece of computer kit – comes with a PC keyboard and interface, although a standard Atari keyboard can be connected if you're nostalgic for that spongy typing experience. The standard model also arrives with an Atari-compatible mouse and an 850Mb hard drive.

It can take more memory than any Atari machine, too – you can expand the paltry 4Mb supplied up to a staggering 1Gb of RAM. The graphics card supplied is the ET4000 W32 PCI card, providing 24-bit colour at high resolutions.

Medusa has certainly made some brave decisions during the design process, such as persevering with the new PCI standard. Making a TOS clone as future-proof as possible has to be a good idea though, and we commend Medusa for taking this step.

Medusa also has plans for PC and Mac processor cards, providing a true cross-platform solution, but we'll reserve judgement on brave claims like this until we've seen the evidence. As for software compatibility, Medusa claims that all cleanly written GEM applications will run without problems. The software compatibility chart available at its Internet Web site looks promising – check the Software Compatibility panel (opposite) for more details.

Get in touch

For more information about the Hades, contact Medusa at: Medusa Computer Systems, F Aschwanden, Buchhaldenstr 16 CH-8610 USTER, Switzerland. You can also e-mail the company at: caschwan@stud.ee.ethz.ch or visit its Web pages at: http://www.ee.ethz.ch/~caschwan/medusa.html.

HADES SPEC

The Medusa Hades is one hellish piece of machinery, if you'll excuse the pun. It offers:

- Four PCI-bus expansion slots.
- VME-bus expansion slot, as used in the MegaSTE series.
- Enhanced IDE interface capable of operating two drives at a maximum rate of 10Mb per second.
- SCSI interface capable of operating up to seven drives at up to 4Mb per second.
- Enhanced-density floppy drive using ED, HD and DD disks for 2.88Mb, 1.44Mb and 720K capacities.
- 25-pin modem port capable of up to 19,200 baud.
- 9-pin modem port capable of up to 250,000 baud.
- LocalTalk-compatible LAN port, as per the TT and Falcon.
- 25-pin standard printer port.
- MIDI In and Out ports.

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Medusa T40 and T60

Medusa also produces some cutting-edge clones for the rest of us. If the Hades seems too much, try one of these machines instead.

If the brain-melting technical specs of Medusa's Hades are way beyond your computing needs, try one of Medusa's lower-spec machines. Both computers are still light-years ahead of the standard Atari technology we're used to – look on them as smaller brothers of the Hades.

The 'baby' model, the Medusa T40, sounds a bit like an old Russian tank. Don't let the pedestrian name fool you, though, because it's still a serious piece of computing hardware. Medusa claims that the T40, which is based on the Motorola 68040 processor, is the fastest TOS-compatible machine using this CPU. The processor runs at a nippy 64MHz, twice as fast as the TT's 68030 and four times faster than the Falcon – and the '040 is a speedier chip to begin with, remember. Both the address and data buses tick over at 32MHz.

The T40 runs a modified version of Atari's TOS 3.06, as used in the TT. It can support up to 128Mb of memory directly on the board, and Medusa claims it can support a massive 4Gb using extra cards.

Will we all end up with computers which look identical? This is Computer Direct's D60, a variation on the Medusa T60.

The entry-level T40 and T60 machines arrive housed in smart midi-tower cases. Rehousing them in any other case should be a simple job.

Medusa claims that the T40 is the fastest TOS-compatible machine based on Motorola's 68040 CPU

While the T40 isn't as up to the minute in terms of expansion possibilities, it does have a 16-bit ISA bus for graphics cards. SCSI support for hard drives isn't fitted as standard, although cards are available. The basic T40 supports one or two internal IDE drives and also offers a DMA port, enabling you to access older drives and Atari laser printers.

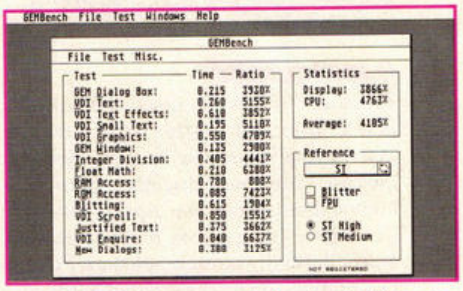
Retirement age?

The mid-point between the T40 and the intimidating Hades is Medusa's T60. It's essentially similar to the T40, but utilises the faster and more powerful 68060 processor. The architecture and features are otherwise identical, though. Medusa says that upgrading the T40 to full T60 specification is a very easy job indeed. You simply add the 68060 board, then complete a simple soldering job to supply power to the new CPU.

Unfortunately, the absence of an on-board DSP prevents all three Medusa machines from running software which requires this chip, such as *Cubase Audio* or *APEX Media*.

Spend, spend, spend

You can find out about the T40 and T60 from Medusa's Web site (see opposite). For more information about Computer Direct's similar machines, send an e-mail to info@compdirect.com, or log on to its Web site at: http://www.compdirect.com/.



GEMBench File Test Windows Help

GEMBench

File Test Misc.

Test	Time	Ratio
GEM Dialog Box:	0.215	2320%
VDI Text:	0.260	5155%
VDI Text Effects:	0.610	1852%
VDI Small Text:	0.195	5110%
VDI Graphics:	0.550	4709%
GEM Window:	0.125	2900%
Integer Division:	0.405	4441%
Float Math:	0.210	6380%
RAM Access:	0.780	808%
ROM Access:	0.085	7422%
Blitting:	0.615	1904%
VDI Scroll:	0.850	1551%
Justified Text:	0.375	3662%
VDI Enquire:	0.040	6627%
New Dialogs:	0.380	3125%

Statistics: Display: 3866%, CPU: 4763%, Average: 4105%

Reference: ST; Blitter; FPU; ST High; ST Medium

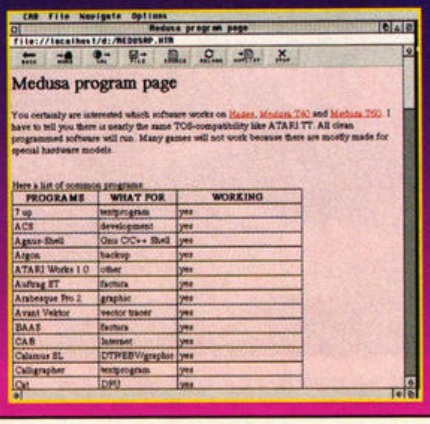
This *GEMBench* screen grab shows how fast Computer Direct's D60 is compared to a plain vanilla ST.

SOFTWARE COMPATIBILITY

Medusa has conducted some extensive testing on all three of its machines, using both popular commercial and widely used PD and shareware software. Medusa states that the level of TOS compatibility is "close to the TT," and that all cleanly written programs will run. Not surprisingly, games aren't as likely to behave – Medusa says, "Many games will not work because they are mostly made for special hardware models." Then again, are you paying that much for a machine to play games on?

While we can't list every program Medusa has tried – although the list is available from its Web site – it's good to see that some popular software works without problem on the Medusa clones. Heavyweight DTP and graphics programs such as *Calamus SL*, *AtariWorks*, *Chagall* and *DA's Layout* all function properly, apparently. Since the clones all come equipped with MIDI ports, it's a relief to see that *Cubase 3* and *Notator Logic* have no problems, either. If you're a coder, you'll have no problems with *GFA Basic* and its compiler, and *Pure C* runs, although there's no mention of HiSoft's *Lattice C*.

Disappointingly, the superb *MagiC* multitasking operating system is listed as, "No, only for 68030!" *MiNT* will run, but there's no mention of Gribnif's *Geneva*. The *Linux/68k UNIX* clone also apparently runs well.



Medusa program page

You certainly are interested which software works on Hades, Medusa T40 and Medusa T60. I have to tell you there is nearly the same TOS-compatibility like ATARI TT. All clean programmed software will run. Many games will not work because there are mostly made for special hardware models.

Here a list of common programs:

PROGRAMS	WHAT FOR	WORKING
7up	textprogram	yes
ACS	development	yes
Agnus-Shell	Gnu C/C++ Shell	yes
Argon	backup	yes
ATARI Works 1.0	other	yes
Auftrag ST	formula	yes
Arabesque Pro 2	grapher	yes
Avant Vektor	vector tracer	yes
BAAS	formula	yes
CAB	Internet	yes
Calamus SL	DTP/EBV/grapher	yes
Calligrapher	textprogram	yes
Cat	DPU	yes

The Medusa Web site contains an impressive list of fully tested software which runs on all three of its Atari clones.

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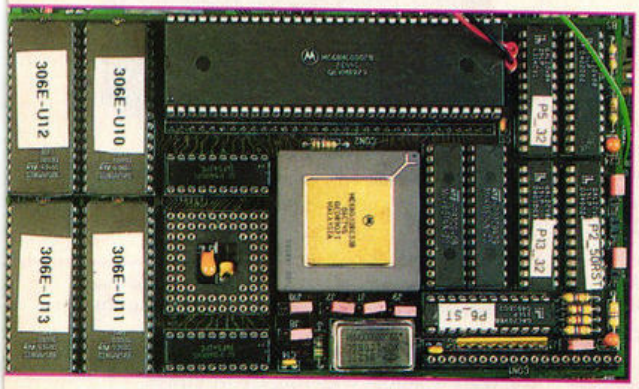
The Alternatives

If a whole new machine seems excessive, there's always the option to give your old one some go-faster stripes.



The small but perfectly formed PAK 68/3 adds a huge speed injection to your ST and enables you to run '030-specific software such as virtual memory programs.

If you want to increase your ST or Falcon's raw computing power but can't justify the cost of one of the new clone machines, there is another option. Hardware accelerator boards have been around since the early days of the ST, but most simply inject some speed by increasing the clock speed of your machine's central processor. A more powerful option is to completely replace the CPU with the next model up in the Motorola series, providing a far greater speed enhancement.

Reprocessed

The most obvious advantage of adding a new CPU to your existing setup rather than buying an entirely new machine is the cost. With a new machine, you're buying items which you already own all over again – disk drives, memory, monitor and so forth. If you upgrade the CPU, you can continue using the existing hardware, so you cut the cost to a more manageable level. Admittedly, you don't get the more cutting-edge features offered by clones like the Hades and T60, such as the PCI interface, but the much lower cost makes this an acceptable compromise.

The ST uses the original Motorola processor, the MC68000. Next up in line is the 68020 used by the Amiga 1200, followed by the more powerful 68030, as used in the TT and Falcon. There aren't any 68020 upgrades, so you'll be making the jump to the '030 chip.

The PAK 68/3 board from System Solutions replaces the ST's 68000 with the newer '030 model. It's not just a case of swapping one chip for another, though – various aspects of the ST need to be tweaked to handle both the increased speed and the fundamental differences between the two chips. Fitting the PAK is a complex job, involving lots of soldering directly to your ST's motherboard. It isn't a job for the fainthearted, but System Solutions offers a fitting service.

The advantage of adding a new CPU to your existing setup rather than buying a new machine is the cost

Since the Falcon already uses the 68030, the next CPU in line is the 68040 processor used in Apple Mac models such as the Performa 630 and LC 475. It's faster, obviously, but also arrives in two forms. The full MC68040 chip also contains a maths co-processor or FPU, while the MC68LC040 chip is a slightly cut-down version without the FPU.

The Afterburner040 board from Titan Designs enables you to add an '040 chip to your Falcon. It fits into the Falcon's internal system bus expansion port, but still requires some fairly hefty modifications to your machine. Again, Titan can arrange a professional fitting service if you're nervous about complex electronics work. Afterburner is also a large piece of kit, and won't tuck into your Falcon's existing case, so you'll need to re-case your Falcon. You can transfer it to a tower case, or to one of the new Falcon Mk X cases, which will be available from Titan Designs soon.

The Afterburner board upgrades your Falcon's 16MHz 68030 CPU to one of the two '040 models, running at 32MHz. As well as doubling the clock speed, the 68040 is a significantly faster processor, providing a very healthy overall speed increase. A through port is also provided for the expansion bus, so you can still fit further hardware goodies such as the Exposé digitiser.

If you want to stay abreast of current technology, the clones may well be the way forward

As well as the all-important performance increase, Afterburner provides you with the ability to upgrade your Falcon's memory above and beyond the original 14Mb limit imposed by Atari's design. Two 72-pin SIMM sockets are provided, so you can take your Falcon up to a whopping 128Mb of RAM. With SIMM prices currently as low as £100 for a 16Mb 72-pin SIMM, boosting your Falcon to 36Mb wouldn't add much to the Afterburner's cost.

Prices for the Afterburner may seem steep for most home users, though – the 68LC040 version sells for £449, with the full 68040 board arriving at £539. If such a large outlay seems excessive, a 'standard' accelerator such as System Solutions' £179 BlowUp FX (*STF* 85, 95%) can still provide a massive speed injection along with the memory expansion capabilities and a screen resolution enhancer.

The way ahead...

If you do want a new machine, the clones are your only TOS-compatible option. It's difficult to come to any positive conclusions about them, though. The prices of most are comparable to current Macintosh and PC technology, but a new platform means new software, higher expenditure and starting all over again from the beginning. If you want to stay abreast of current technology but still use the friendliest computers ever created, the clones may well be the way forward. *stf*

Sadly, no-one saw fit to send us any pictures of the AfterBurner, but we did find this rather odd advertisement.

The future's bright, the future's purple... well, perhaps not, but the clones could be the way forward for TOS lovers.

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PD	ST 87	8 Ball Pool and 7 others
PD	ST 96	Aliens
PD	ST 102	Battletris/Defenda 2/Fuzzball/ Galaxians/Happyworm
PD	ST 127	H Mec 2 & Blobrace (STE)
ED	ST 5	Francais (learn to speak French)
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Positive Image

Following its recent debut on the *ST FORMAT* Cover Disk, *Positive Image* is now on full release. Read on to uncover its secrets.

Positive Image is great for creating composite graphics, but this is a perfectly genuine photo of my living room (ish).

Although a demo of *Positive Image* has been available for some time, the full version of this feature-rich image editor has been eagerly awaited by the Atari graphics community. The good news is that it's now due for release.

The program comes with separate versions for ST and 68030 systems (Falcon and TT) and a wide range of functions which few other programs can match, at least in theory. As well as hardware-specific support for DSP and FastRAM equipped machines, it can use virtual memory on hard disk systems and runs in any GEM desktop resolution. It's also compatible with the Falcon's BlowUp FX board and ST accelerators like the PAK 68.

Basic tools

The prime function of any image processor is to perform simple brightness, contrast and colour adjustments on whole images. *Positive Image* has a full set of tools, and also allows gamma correction to be applied directly to an image.

The Stretch Contrast Tool is of particular interest. It automatically finds the best settings for maximum image contrast. This can improve the look of washed-out, faded or indistinct images with a single click. Scaling/resizing operations are also essential for this type of program, and *Positive Image* provides the necessary tools to scale by fixed or variable amounts. Other more esoteric shear and warp functions enable you to bend, twist and distort your pictures in a range of silly ways.

You also get image retouching/painting facilities, including most of the standard tools for drawing lines, erasing and filling areas. It has to be said, though, that these are only suitable for minor retouching. They don't have the flexibility or performance to suit complex painting jobs.

Bend, twist and distort your pictures in a range of silly ways

Prime cuts

Block operations are another essential component of this type of program. *Positive Image* has a set of block tools which mark out areas on an image for further processing, including rectangular and elliptical block tools. The Bezier Block tool is especially useful, because it allows you to define an irregular block and then edit the curves which make up the block area prior to any further operation.

Positive Image detects hardware extras such as Alternate (TT) RAM, DSP and FPU, and will also create a swap file on hard disk drives.

The Trace tool takes irregular block definition to a new level by marking an area automatically based on the surrounding colours and the tolerance setting of the function. Unfortunately, traced curves can't be edited after tracing. Once you have defined a block, it can be cut, copied and pasted to another image.

Image filtering is a core feature for all image processors, and *Positive Image* is no exception – the filtering capability is one of its strengths. As well as a set of built-in and external filters, such as Smooth, Sharpen, and Emboss, the program enables you to define your own in the form of a 2D matrix. Although you need an understanding of matrix maths to make full use of this, it does lend itself to experimentation and can produce some useful results.

For example, the Remove Noise filter can tidy up 'dirty' images, and is also great for removing artefacts (mosaic-like structures) from JPG images. Alas, these operations are somewhat slow unless the program is running on a Falcon, where they zip along merrily with the aid of the DSP. All the filters can be applied to marked areas as well as entire pictures.

The crunch

Positive Image is to be applauded, not only for its range of features but also because it shows what the Atari platform still has to offer. It is cheap, well specified and has a professional feel. Most users who need graphics processing on their ST, Falcon or TT will easily get something useful out of it.

Positive Image conceals a surprisingly large array of functions in its well-proportioned toolbox.

However, there are some drawbacks. The program is currently a bit rough at the edges, and some functions don't work quite as well as they should. The painting tools in particular are awkward and slow to work with, and the editing of Bezier blocks results in many tedious screen redraws. There are also some surprising omissions, such as the lack of GIF and Photo CD support. On balance, though, it can be genuinely useful and is well worth a close look. *stf*

DUG ARMSTRONG

Product: Positive Image
Price: £65 (UK P&P £2)
Contact: Floppyshop
Tel: 01224 586208
Min system: Any Atari, 1Mb

STF VERDICT ● STF VERDICT ● STF VERD

HIGHS
- Excellent manual
- Many features
- Performs well on fast machines

LOWS
- Slow on ST/STE
- Still a few bugs

In short...
A little rough around the edges, but *Positive Image* is well worth a closer look.

80%

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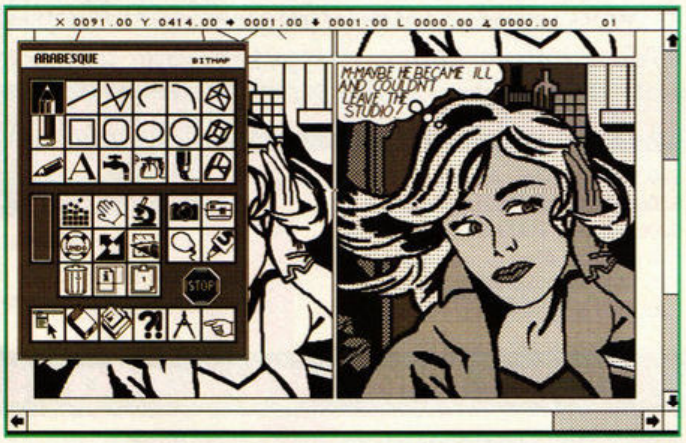
Arabesque Pro

Think bitmaps. Think vectors. Think bitmaps and vectors. You'll love this, then – it enables you to deal with both types of graphic at once.



The floating tool palettes are clear, and it doesn't take long to learn the icon's functions.

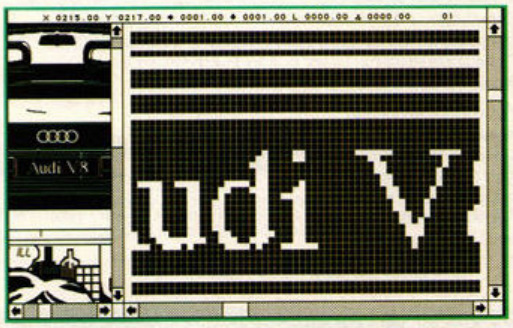
Here's a scenario for you. You're touching up some scanned artwork, ready to drop it into a letterhead. At the last minute, you decide the bitmapped image isn't quite as smooth as you'd like, so you decide to add a vector graphic. The problem? You need a package which handles both types of graphic.

Arabesque Professional is just such an animal: a mono art package which is as happy with complex vector images as it is with bitmapped doodles. When it was launched in 1993, *Arabesque* faced stiff competition from market leader *Megapaint Professional*. Since the demise of *Megapaint* and the departure of programmer Tommy Software to pastures new, *Arabesque* appears to have the market sewn up.

In bitmap mode, *Arabesque* is one of the finest editing packages we've seen so far. Although it uses GEM to an extent, *Arabesque* favours a Mac-like tool palette which floats over your current image window. Every function is triggered by clicking smart clear icons, and it's very easy to get to grips with. All the standard drawing tools are there, including pre-defined lines, boxes, ellipses and so on. *Arabesque* also provides some powerful Bezier curve functions – and they're simple to use, unlike those in some 'professional' packages.

In bitmap mode, it's is one of the finest editing packages we've seen so far

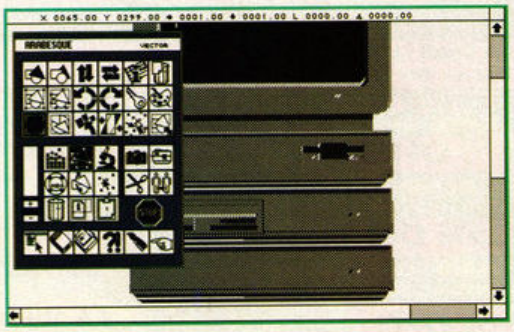
Artists often judge a bitmap editor by the strength of the magnified mode. *Arabesque* doesn't disappoint here, using a split window system capable of displaying the original alongside the zoomed portion. Even better, you aren't limited to single-pixel editing while you're zoomed in, because all *Arabesque's* tools work beautifully in close-up mode.



Arabesque's Zoom mode is superb. All the drawing tools are available from the palette.

Vector in

The vector editing part of *Arabesque* is separate from the bitmap editor, but integrates neatly with it. You can snatch a bitmapped block and transplant it into the vector editor, where you can use it as a template to create a smooth vector copy.



The vector editor in *Arabesque* is much like the bitmap one. Once you've learnt one, you'll find the other easy to work with.

Arabesque doesn't convert it for you, but it does provide excellent tools for the job. Again, the magnified view is superb and all the tools are available, enabling you to add points, lines and Bezier curves to your vector creation.

Unusually, you can move vector drawings back to the bitmap portion of *Arabesque* – they lose their scalable nature though, because they're converted back to bitmapped images. This can be handy, though – you can create a vector image, scale it to whatever size you need, then create a bitmapped IMG file for use with any DTP package.

To and fro

In bitmap mode, *Arabesque* is capable of loading and saving images in IMG, PAC, packed and unpacked *Degas* and mono IFF formats. The absence of more modern formats, such as GIF and TIF, is disappointing, though – you'll need a separate conversion utility, such as the shareware *GEMView*.

Vector support includes *Arabesque's* own format, plus GEM metafiles for use with software such as *Papyrus* and the CVG files used by *Calamus* and *Outline Art*. The *Calamus* support is excellent, and provides a dependable method for producing vector images without breaking the bank.

So, has *Arabesque* evolved much since we looked at it in issue 45? Er, no – it's almost identical, in fact. There's very little that's new, but it's as powerful and usable as it was back then. If you need to mix vector and bitmap images in your work, you really won't find anything to touch *Arabesque's* power. It could do with a further price drop – it was only £30 more expensive three years ago – but it's still a superb package, and a worthy addition to any DTP enthusiast's armoury. *stf*

FRANK CHARLTON

Product: Arabesque Professional
Price: £99.95
Contact: Titan Designs
Tel: 0121 6936669
Min system: All Ataris, requires 1Mb and ST-High resolution

VERDICT • STF VERDICT • STF VERD

HIGHS
- Superb in both editing modes
- Fast and easy to use

LOWS
- Needs a bigger price drop
- No colour support

In short...
Both bitmap and vector editors are superb, and it's perfect for mixed editing.

75%

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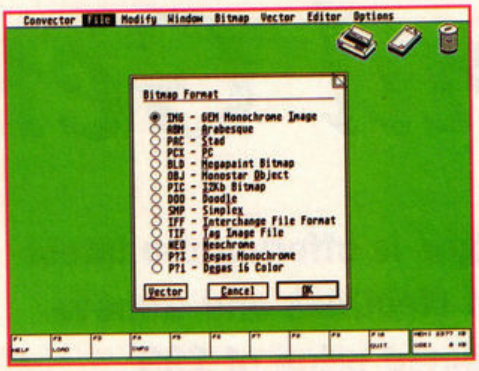
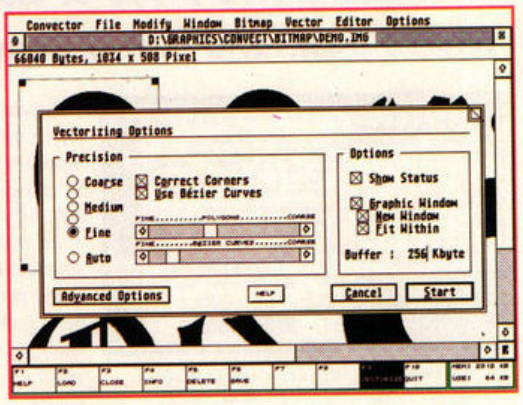
Convector Pro

The perfect companion to *Arabesque*? This bitmap-to-vector graphics conversion utility makes it easy to swap formats.



A wide range of bitmap formats can be imported. It goes way beyond the usual IMG and *Degas* support.



Start to vectorise and you see this dialog box, where you can fiddle with the settings to see how they affect the finished result.

Convector converts bitmap images into vector graphics. Why would you want to do this? Well, vector graphics have much smoother outlines, because they're constructed from a mathematical description of the object, and they can be scaled without suffering from 'jaggies' – the jagged-edge effect common in bitmap graphics.

Unfortunately, most clip-art arrives in a bitmap format, such as IMG, and scanners can't produce vector graphics either. The answer is to convert them yourself – either manually, using a program such as *Arabesque* (reviewed opposite), or automatically using an autotracer, such as *Convector Pro*.

Tracing paper

Convector takes your original bitmapped image and applies some complex algorithms to it, carefully tracing the solid edges of the image to produce a vector graphic representation. It decides whether a combination of straight lines or Bezier curves best suits the section it's tracing, then builds the vector image one object at a time. The advantage of using an automatic system is obvious – tracing vector images by hand is slow, and very tiresome if you have a lot of pictures to convert.

Convector uses the standard GEM interface and installs a custom Desktop. Any loaded bitmaps or converted vector images are represented as icons on this Desktop, and switching between them is a doddle. Options are available from the menu, or can be activated using key presses or a static function key bar at the bottom of the screen, à la *First Word*. There's nothing cryptic about *Convector's* interface – it's a cinch to use, and you'll be flying with it after a very short time.

Computer magic

Vectorising an image is simplicity itself. *Convector* opens the bitmap image in a window; click and drag the mouse to define the area you want to convert. The whole image is selected by default, but you can easily choose individual parts instead. Select the Vectorize function to bring up a dialog box where you can adjust the working parameters. Selecting Auto forces *Convector* to do everything for you, but you can tweak the settings as much as you like once you're a bit more confident.

> **There's nothing cryptic about the interface – it's a cinch to use**

The resulting vector image is opened in a new window. You can switch the bitmapped image on and off to see how well the image has been converted, zoom in and out and tell *Convector* to show the vector objects either filled or as outlines. The program can open several images at once, so you can go back to the bitmap and repeat the process using different settings, then compare the results and choose the better version.

If you have *Arabesque*, you can run *Convector* as a GEM Accessory. This enables you to autotrace selections from *Arabesque's* bitmap editor and have them dumped into the vector editor automatically.

Convector works very well indeed. The vectorising process is fast and produces superb results with almost every image. Very complex bitmaps may not work well, but vector graphics don't generally cope well with that kind of thing anyway. The interface, autotracing system and on-line help make *Convector* a very easy program to use, even if you're completely new to vector images.

However, there's no facility to edit images directly, so you do need a vector editor such as *Arabesque* to refine the results. Mind you, the autotraced results are so good, you probably won't need to. Some day, all software will be this easy to use. *stf*

FRANK CHARLTON

Product: Convector Professional
Price: £79.95
Contact: Titan Designs
Tel: 0121 6936669
Min system: All Ataris, 1Mb required

EXPORT LICENSE

Convector can export vector images in a wide range of formats. As well as supporting the *Arabesque* format, *Convector* offers GEM metafiles (both with and without Bezier curves), *Calamus* CVG and *Megapaint* formats. It can also export Encapsulated PostScript (EPS) files, which many PC and Mac applications can read.

***Convector* can even export individual characters in the *Calamus* font format, so you can create fonts on paper, then scan and vectorise them.**

STF VERDICT

HIGHS
- Produces smooth results
- Wide range of formats supported
- Very easy to use

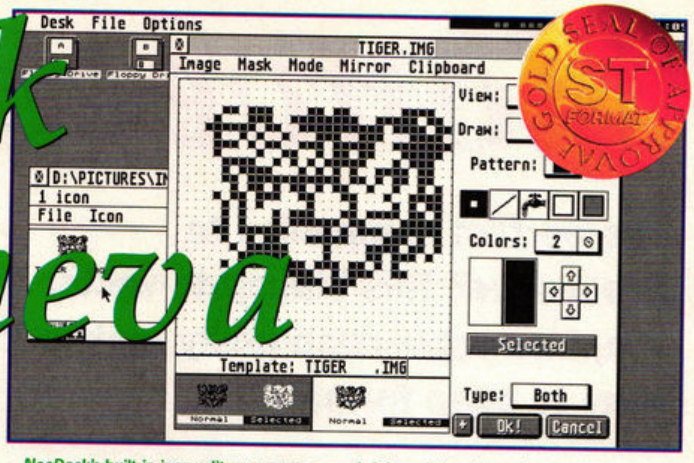
LOWS
- No editing functions

In short...
The best bitmap-to-vector convertor money can buy, and it's very easy to use.

91%

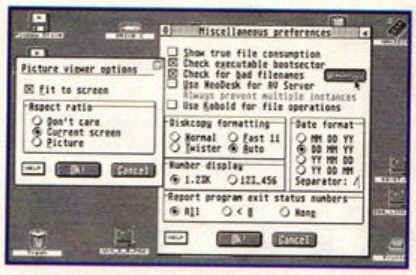
www.stformat.com

NeoDesk and Geneva



NeoDesk's built-in icon editor program now shrinks existing large picture images to icon size for instant use, making it easy to customise your Desktop.

Titan Designs is offering the latest versions of *NeoDesk* and *Geneva* for a combined price of £99. What's new, and is it a good deal?



The Miscellaneous preferences dialog in *NeoDesk* enables you to adjust the picture viewer options.

NeoDesk, from USA publisher Gribnif, was the first popular replacement desktop for the ST. It offers lots of user-friendly features and makes your Atari more powerful and fun to operate. It enables programs to be run from the Desktop and adds countless convenient features.

www.stformat.com

Geneva's Miscellaneous options dialog enables you to choose between drop-down menus and Mac-like pull-down ones.

Geneva is Gribnif's alternative multitasking operating system for the ST, ranged against *MagiC* and Atari's own *MultiTOS*. A multitasking ST can simultaneously run as many programs as you have memory for and enables you to switch between them at will. We've looked at previous versions of *NeoDesk* and *Geneva*, and they've always been very highly rated. Gribnif products used to be handled in the UK by Compo Software, but are now distributed by Titan Designs. It is offering the latest version of *NeoDesk*, bundled with *Geneva*, for an all-in price of £99.

Reading matter

Both programs come with printed manuals in an A5 ringbinder, and there's plenty to read – they run to 330 pages in total.

NeoDesk 4.05 is not radically different from preceding editions, but loose ends have been tidied up and it contains some attractive new features, such as the ability to use *Kobold* for file management, speeding up copy, move or delete operations. *Geneva* now stands at version 1.04 and includes the latest bug fixes and many improvements.

Once you've tried this combination, you won't want to be without it

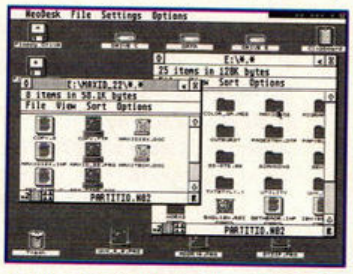
Both programs were written by the same programmer and they complement each other – see issues 55, 64 and 68 for more details. Either will run on a 512K ST, but you'll need a 1Mb machine to use both together, and if you're into multitasking you can't have too much RAM.

Perfect partners

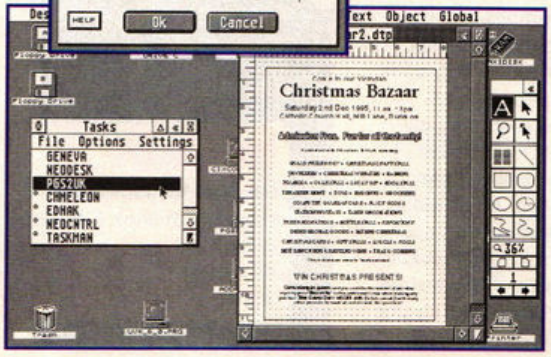
These programs work together perfectly and are satisfyingly easy to use. Multitasking may not interest everybody, but *Geneva* provides all the advantages of a modern operating system. *NeoDesk* is packed with features, and the complete package offers a lot for 'serious' users. Once you've tried this combination, you won't want to be without it.

These programs costs almost £60 each, so the bundle price of £99 is a pretty good offer. If you want to become a 'power user', Titan Design's package is well worth considering. *stf*

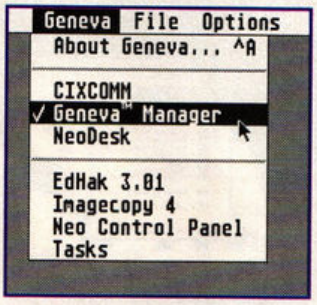
PETER CRUSH



Holding down the [Control] key while clicking on a folder opens an extra new window for that folder, instead of simply replacing the first one with the second.



At first it's odd to see programs running within resizable windows on your 'NeoDesktop', but you'll soon get used to the benefits.



Click here to switch between running programs. You're not limited to six Accessories – Geneva enables you to have as many as you want.

Product: NeoDesk/Geneva package
Price: £99
Supplier: Titan Designs
Contact: 0121 693 6669
Min system: Any ST, 1Mb required, 2Mb and hard drive recommended

STF VERDICT

HIGHS
- Compatible, integrated package
- User-friendly
- Extremely customisable

LOWS
- Requires plenty of RAM to get the best from both components

In short...
Unlike Charles and Di, *NeoDesk 4* and *Geneva* make ideal partners.

91%

www.stformat.com

Mission 1

Give me a go/no go for access. ST? Go. CD-ROM drive? Go. German-English dictionary? Go. Okay, we are go for access.

CD-ROMs have exploded on to the Atari scene in a big way. The seductive promise of these shiny platters stuffed with juicy goodies has convinced many people to splash out on the hardware, but good discs remain elusive.

About 90 per cent of the Atari-specific CD-ROMs we receive for review look as if they were thrown together in a few days, and it seems everyone with access to a CD writer and pressing plant is determined to crank out another collection of generic PD and shareware. *Mission 1* from German compiler XWare is no exception.

Sprechen zie...

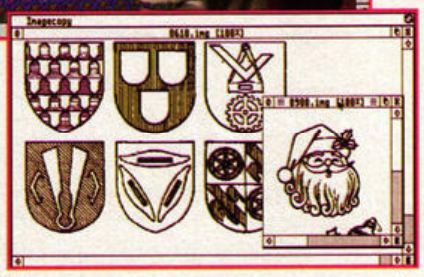
The big problem for most of us is the language barrier. *Mission 1* is almost entirely in German: both README files and actual applications are predominantly Teutonic in flavour, and there's very little English content. This wouldn't be an insurmountable obstacle if the disc offered a directory listing or rough guide to its content in English, but it doesn't. *Mission* is largely unfathomable without a working knowledge of German.

Full helping

Xware claims – rightly so, we hasten to add – that this disc is almost full, containing 620Mb of data. However, there isn't an index and the directory structure seems to have been devised by someone with an odd sense of humour. Falcon software, for example, can be found tucked away in several subdirectories, so you really do need to explore. The KATALOG folder seems promising, but appears to be the front-end program for one of the Whiteline CD-ROMs, complete with content listings for what looks like the Whiteline *Alpha* disc.

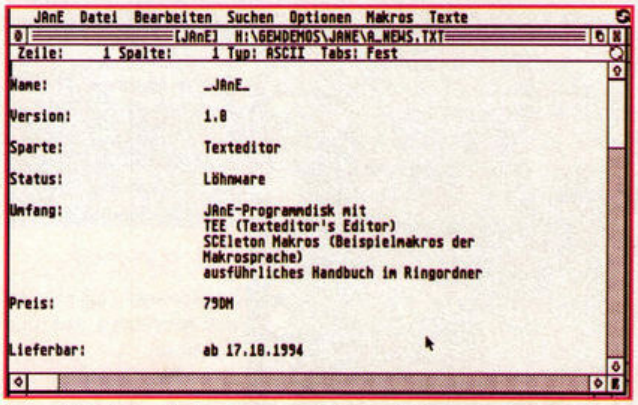
README files and actual applications are predominantly Teutonic in flavour

With 100Mb of images as fillers, it's reassuring to find that at least they're good ones.



There's lots of clip-art, but it's tiny, fuzzy and not really much use unless you have a low-resolution printer.

See that 'Not Public Domain' banner? So why is this in the PD_SHARE folder, exactly?



As usual, there's a collection of commercial demos which come in handy if you're shopping for a particular program. And can read German.

One of *Mission's* selling points is that it contains the full versions of a few programs and collections. *Laser Design Pro*, for example, purports to be a fully specified DTP and printing suite. It may well be, and it certainly looks nifty, but it's in German, so it's doubtful you'll use it much, if at all.

Picture gallery

The *Frame Art 1* and *2* packages, along with the *Thoughts Pack*, offer lots of mono clip-art in PAC and IMG formats. They appear to have been commercial collections at some stage, but the images are small, rough and not much use on anything but a 9-pin printer. You also get the contents of the *4U-Series* PD disks, which seem to contain lots of German shareware – most of which is available from dozens of other sources.

The curse of the Atari CD-ROM scene strikes again: lots of 'fillers' have been shoved on to beef up the overall byte count. *Mission* features no less than 200Mb of GIF images and the same old FLI animations which have already appeared on numerous CD-ROMs, and proclaims this as a "Bonus!" Add this to the tons of clip-art, *Calamus* and *Signum* fonts and you begin to see that there are a lot more fillers than you might realise.

We aren't impressed. With good-value collections such as the *Crawly Crypt* volumes (*STF* 74, 83%) available, new CD-ROMs need something extra to make them shine. *Mission* doesn't.

Unless you're intent on owning every Atari CD ever produced, stick to the competition. CD compilers, take this as a warning – you'd better make your effort stand out if you want to sell to an audience rapidly tiring of the same old animations and fonts. ***stf***

Product: Mission 1 CD-ROM
Price: £24
Contact: 16/32 Systems
Tel: 01634 710788
Min system: All Ataris, CD-ROM drive required

VERDICT • STF VERDICT • STF VERD

HIGHS
- 620Mb for a reasonable price
- Good games selection

LOWS
- Too much of a mixed bag
- Too many fillers

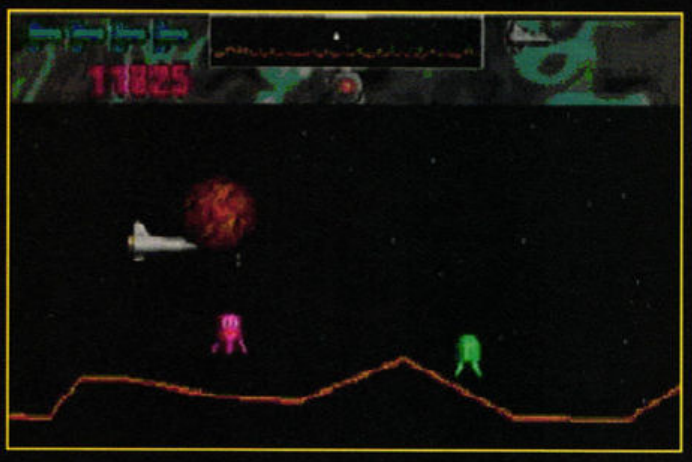
In short...
With nothing to make it stand out, this disc redefines the word 'dull'.

43%

www.stformat.com

Spice

Classic shoot-'em-up *Defender* has finally arrived on the Falcon, but is this clone the *Spice* of life?



Watch out for the pink guys – they home in while the drones make off with survivors.

Wrapped in the comforts of nostalgia, it's easy to think that every game released before 1985 was stormingly playable and addictive beyond belief. In fact, mediocre games abounded, but there were a few titles which possessed something special. *Pacman*, *Donkey Kong* and, of course, *Defender* slide comfortably into this category.

Defender offered remarkable depth for its time, constantly presenting new challenges and allowing a sense of freedom that has rarely been seen in any shoot-'em-up since. Any clone which emerges today therefore carries with it a possibility of divine gameplay, but there's also a risk that that 'something special' will be lost in a bid to add flashy presentation. Even Jeff Minter's Jaguar version fell short of many people's expectations.

Spice is the latest challenger to the *Defender* crown, and one look is enough to tell you that the nostalgia card is played fairly strongly. The familiar, hollow, red landscapes are in place, but just a touch of solidity has been added to the aliens, reminding you that you're in the 1990s.

Old-style cooking

This authenticity extends to the gameplay. In true *Defender* style, your mission is to fly to and fro over the planet's surface, fighting off an alien attack and protecting the inhabitants down below.

The task is made more tricky by intelligent enemies. Although it's usually the easily-targeted drones which carry off the humans, it can be hard to zap them with two or more swarmers on your tail. Playing *Spice* well means keeping a careful eye on the radar while using your smart bombs only when absolutely necessary.

Your mission is to fly over the planet's surface, fighting off an alien attack

It's only once you actually grab hold of the Jaguar PowerPad that the *Spice* dream begins to dissolve. It looks like *Defender*, and works on the same basic principles, but the gameplay is different: the instant speed of the original disappears in a puff of slightly wooden movement. This feeling does fade as you continue playing, but matters certainly aren't helped by your shiny new craft. The original ship may have been blocky, but at least it managed to look a little more sleek than the Space Shuttle.

The general presentation does its best to fill the small holes left by the gameplay, with neat little pixel-shattering explosions and healthy digitised sound effects and music throughout; smoothly scrolling planets in the background add to the visual appeal. The ability to use a Jaguar PowerPad, placing the main fire, warp and smart-bomb controls at your fingertips, is also a bonus.

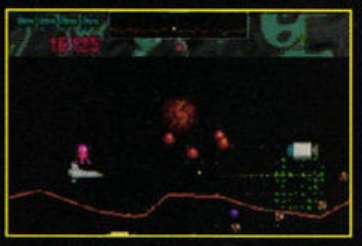
The real deal?

Spice hasn't made huge efforts to jump into the 1990s and the semi-authentic graphics force comparisons with *Defender* – an activity which reaps disappointment. Sure, the original wasn't particularly slick by today's standards, but it did have immense playability on its side.

That said, *Spice* is built on the same basic concept, and once you get used to the controls, it does play reasonably well. With a little sprinkle of extra playability, it could have been a real winner. Then again, given sedate gameplay the original *Defender* probably would have bombed. Such is the fine line between outstanding and average video games. *stf*

NIAL GRIMES

Look ma, no hills! *Spice*'s landscapes echo a time, long long ago, when men were men and graphics were decidedly naff.



Spice looks like *Defender*, but it's just not the same. Take me back to the early 1980s.

The radar is invaluable for clearing the sector and avoiding collisions at speed.

The purple dots are humans (Yeah? – Nick). Shoot the alien and they fall safely to the ground.

Product: Spice
Price: TBA
Contact: CyberSTrider
Address: PO Box 78, Manchester, M21 8SJ
Min system: Falcon, 4Mb, PowerPad compatible

VERDICT ● STF VERDICT ● STF VER

HIGHS
- Looks like *Defender*
- Nice presentation
- Sounds great

LOWS
- Doesn't match the original's playability

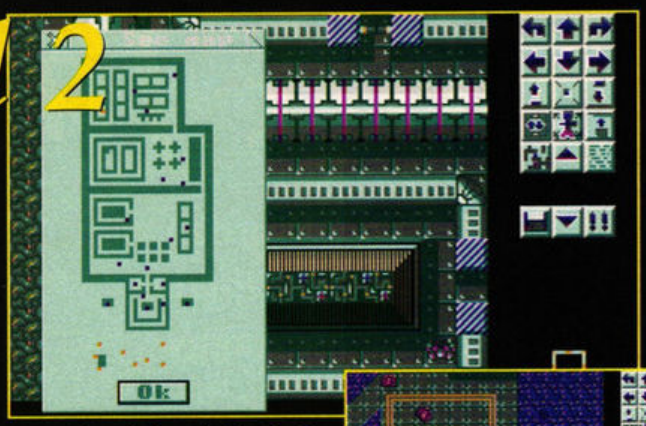
In short...
Reasonably playable and well presented, but it doesn't measure up to the original.

62%

www.stformat.com

Bio Hazard 2

Alien hordes have spread into every corner of the solar system, and only your elite band of cyborgs can save the human race.



Icons, don't you just love them? *Bio Hazard* is definitely a manual-on-lap game, at least at first.

Plan your attacks carefully and you'll soon be on to the next scenario. Here, one of our intrepid heroes lies in wait for an alien.

Alien has doubtless provided the inspiration for more computer games than any other film. It seems that game players the world over like nothing more than charging into an infested space station with alien annihilation on their minds. Welcome to *Bio Hazard*.

Unlike many of its peers, *Bio Hazard* isn't an 'in yer face' shoot-'em-up. Instead, you need to take a strategical approach to defend a space station from hostile alien invaders. Each marine in your squad is allocated a number of move points which can be used to advance your position and get splattering. Ten scenarios await your attention, and the universe needs you.

Control freak

The game is viewed from an overhead perspective and members of the squad are controlled and armed via a large icon panel at the right-hand side of the screen. Although a little daunting at first, the wide range of controls allows quite complex attacks to be planned. For instance, the 'opportunity shot' instructs a marine to wait until an alien pokes its head around the corner before loosing a round.

Step-by-step movement doesn't create an ultra-tense experience, but the atmosphere is helped along by the crisp graphics; add a second player and a Jaguar PowerPad and things improve dramatically. The prospect of more powerful alien-mashing machinery also keeps you going.

Bio Hazard 2 looks neat and is quite enjoyable once you've mastered the controls. It's a little too sedate to get the juices flowing, as any good sci-fi thriller should, but at this price, you really can't complain. Ideal, perhaps, for those occasions when your nerves can't stand another assault on *Substation*. ***stf***

NIAL GRIMES

Product: Bio Hazard 2
Price: £5 (Cheques payable to LJ Greenhalgh)
Contact: LJ Greenhalgh 54 High St, Wick, South Gloucestershire, BF15 5QH.
Min system: Any ST, 1Mb

***STF* RATING 78%**

Conquest of Elysium

A bright red Ferrari, a swimming pool full of champagne – you did say fantasy role-playing, right? Oh.

Ah, *Elysium* in the wintertime: snow-laden trees, picturesque mountains, and a barbarian waiting to knock your block off.

Cast your mind back to the early days of the ST and you will certainly remember *Dungeon Master*. Mirrorsoft's classic redefined role-playing games and proved beyond all doubt that the man in the street could enjoy wading through dingy corridors, up to his waist in sewage, combating the forces of evil.

Nevertheless, the role-playing genre has taken some knocks since then and new arrivals tend to be greeted with a mixture of anticipation and dread – could this be another *Dungeon Master*, or are we in for a dry strategy outing with a zillion options? *Conquest of Elysium* straddles two extremes, in that it offers a full range of characters, adjustable landscapes and multi-player games, and yet you don't need a degree in *Stratego* to begin playing. It's basically a war and role-playing hybrid, involving you in a battle for a continent inhabited by maharajahs, barbarians and wizards.

Although the initial presentation suggests you are in for a *Towers 2*-type experience, battle takes place on a rigidly two-dimensional plain where your presence is indicated by a red sword. The graphics are small, but detailed, changing in appearance as the seasons come and go. As the landscape opens up you find yourself guarding your citadel and roving across the plains, defeating your opponents. Battles are fought on a 'hit-point' basis, so well-planned attacks are usually successful.

The initial disappointment of small graphics and uninspiring battle sequences lessens as you get swallowed up by its depth. The faint-hearted will probably want to sit out *Conquest of Elysium*, if only to avoid its rather dark and heavy nature, but anyone with a penchant for strategy will be well pleased. ***stf***

NIAL GRIMES

Product: Conquest of Elysium
Price: £13
Contact: InterActive
Tel: 01206 852602
Min system: Falcon030, 4Mb, hard disk

***STF* RATING 70%**

www.stformat.com

NBA Jam TE

Be the next Michael Jordan with *NBA Jam Tournament Edition.* All you need is stilts, baggy shorts and years of practice.

The special moves flow like there's no tomorrow – just try stopping this one.

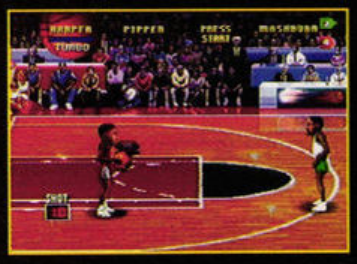
Sports games sell by the bucketful, but the Jag has always been a bit of a poor relation in this respect. Hopefully, *NBA Jam* will change all this.

NBA Jam TE enables you to play basketball against the Jaguar or your friends. While the Jag plays a mean game, games like this really start to shine when you're up against other people. *NBA Jam* was designed with just this in mind – it can use both the Pro Controller and the Team Tap add-on, and up to four players can compete against each other.

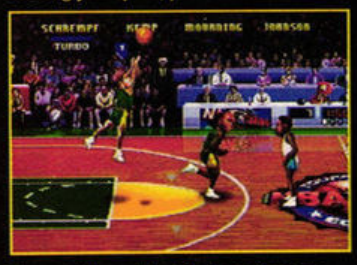
The tip-off

Each game consists of four quarters. You choose your two players at the start of the first one, and should aim for a mix of strong shooting and good passing and blocking.

If your combination of players doesn't work out, you can substitute either or both at the end of each quarter. Badly injured players can also be swapped out this way.



Power-up icons appear from time to time, boosting your speed, power and skill.



You can take a shot at the hoop from any distance, but too much ambition will be rewarded with a stolen ball.

Assuming you win, you then get to play against another team. As the matches progress, you slowly work your way up the league.

Time out

The computer players are very easy to beat at first, but soon toughen up as your play improves, so don't expect to finish this cart in a hurry. With over 120 NBA stars available for your team (and the opposition's) you'll be well occupied for some time.

During play, the A, B and C buttons act as shoot/block, pass/steal and turbo. These are used in various combinations to play the ball in a number of ways. Exactly which manoeuvres can be performed also depends on the player's individual abilities, so don't expect a well-known bricklayer to start hitting three-point shots.

As in the real game, you get more points if you shoot from further back. In some game modes, power-up icons appear on the court. These give you extra abilities and increase your skills.

The graphics are generally pretty good, especially for a cartridge. The players have been individually digitised, with representations displayed both at selection time and during play. Unfortunately, the heads on the players are oversized to an alarming degree, making them look deformed.

> **The soundtrack pounds along and the audio effects add atmosphere**

The animation is adequate, although a little more effort on the backgrounds would have improved things a lot. It is also quite hard to work out which player you are controlling during fast play. Lots of static screens add to a generally polished overall appearance.

The soundtrack pounds along with suitably frantic tunes, and all sorts of audio effects add to the atmosphere. The sound is a cut above the average for a Jaguar game, with individual calls for the various players. The Options screen offers plenty of adjustments to the gameplay, including tag mode, computer assistance and various timer parameters.

The graphics and gameplay are completely faithful to the arcade original. It's fast and furious out there.

Final buzzer

Overall, *NBA Jam TE* is a difficult game to quantify. It comes into its own in multiplayer mode, but the charm may wear off all too quickly for solo players. Some people really rate it highly, though.

You should try to have a go in the shop before splashing out your £60; after all, this is very much in the upper tier of Jaguar game prices. *stf*

IAIN LASKEY

It's half time and and you suddenly realise just how much work the Jag-controlled member of your team is doing (ball hog!).

Product: NBA Jam TE
Price: £59.99
Contact: JTS Atari
Tel: 01753 533344
Min system: Jaguar

VERDICT • STF VERDICT • STF VER

HIGHS
- Multiplayer option
- Great sound effects

LOWS
- Vastly overpriced
- Odd-looking players
- A little repetitive

In short...
Tons of entertainment in multiplayer mode; can be dull if you're on your own.

70%

P&D & Shareware

Try to stay reasonably relaxed as Andy Curtis takes you on a whirlwind tour of this month's top PD and shareware programs.

68000 Demo Coding Guide

Floppyshop, disk LAN5334
All STs, 2Mb required

Originally intended as a shareware release, James Ingram's superb *Demo Coding Guide* is now PD. The author has left the ST for pastures new, but for the price of a disk we can all benefit from his knowledge.

This disk is crammed full of examples and help files which will aid you in your quest to be the world's best demo coder. Eleven topics are covered, including scrolling, borders, sample playback and those all important full-screen display routines. Each has a separate folder, containing source code, documentation and compiled examples.

This is not a package for the beginner; it's aimed at intermediate coders who already have a compiler and some machine code programming skills. You will need *Devpac 3* and at least 2Mb of RAM in your ST to use the examples. You can then find out exactly how to incorporate the demonstrated techniques in your own programs.

Whether you're writing diskzine intros or conventional demos, you'll find plenty of new ways to grab your viewer's attention. This disk is solid gold.

STF RATING: 91%

```
Finally, all the decisions are made - do we restart the music? or
the sine-wave? or the screen number?  or the message? or the ball
pattern?

And  the last thing to be done is to decrease a counter  so  that
waiting code (like the fading in and out routines) know that  the
$70 routine has been done.

And that is that.

Note  that  the OVAL.GFA has been re-written,  because  the  ball
cannot go to the bottom of the screen,  but it can go further  to
the left and right!


James Ingram, 30th May 1994

     I do not mind you using any parts of my code,  or any  ideas
     of  mine.   All  I ask is that you give me a credit  for  my
     ideas or code.  Cheers.


-End of file-
```

The *68000 Demo Coding Guide* has everything you need to inject visual and aural elegance into your machine code demos.

JASSS

Floppyshop, disk GAM5262c
All Ataris (TOS 2.06 and Falcon require a *STOS* fix utility)

JASSS is just the job if you fancy a little pointless joystick wiggling. The graphics are funny and the games are all unplayable. We love it.

Just Another Silly Sports Sim's front screen proudly proclaims: "It's NOT the Olympic Games," and, indeed, it is not. The Norwegian authors do, at least, seem to have a sense of humour about their program. A good job, too, because every event in their spoof Olympics is almost totally unplayable or overly simplistic.

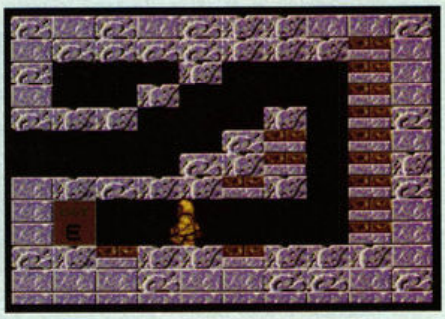
Without exception, the events, ranging from javelin throwing through to apple hunting (and since when was apple hunting an Olympic event, anyway?) require the minimum of player input. A twitch of the joystick to jump or a quick press of the fire button for the shooting is all that is required.

Despite the inherent weakness of multi-game sports sims, *JASSS* is actually fun to play. It isn't a good sports simulator, but it might make you laugh, although probably for all the wrong reasons. In short, it's so bad that it's good.

STF RATING: 54%

Magic Tomb

Floppyshop, disk GAM5434c
All Ataris (TOS 2.06 and Falcon require a *STOS* fix utility)



You must walk to the exit to move to the next level. You won't even hit an obstacle till level six.

Magic Tomb is a platform game which isn't. It isn't that there aren't any platforms – there are plenty – it's just that your character moves almost completely independently of them. As you endeavour to locate the exit to the next level, you frequently find yourself floating blissfully in mid air, completely defying the laws of physics.

Magic Tomb is really just a 2D maze with pretty graphics and a few obstacles here and there. Don't panic, though – you have to reach level six before you encounter the first baddie. As the game progresses there are more and more obstacles to avoid, but the gameplay is never more than moderately difficult. It needs a great deal more depth in order to inspire ST platform game players to rush out and get a copy. Back to the drawing board, methinks.

STF RATING: 49%

www.stformat.com

Lettris compilation

The letters fall, you make words. Your words disappear, you score points. It's like *Scrabble* and *Tetris* all rolled into one.

Floppyshop, disk GAM5318c
All Ataris (TOS 2.06 and Falcon require a *STOS* fix utility)

You've guessed it, it's another *Tetris* clone, but this time with an educational element. Letters, rather than coloured blocks, fall from the top of the screen and it's your job to place them on the grid so they form words, either horizontally or vertically.

The supplied dictionary allows many abbreviations and names, but you can compile your own using stricter rules if you wish. As you build complete words they scroll off the grid and are displayed beneath it until you make your next word.

If you survive long enough, there is a bonus level where the aim is to shoot letters as they fall to form words. When you complete a word, simply press the fire button on your joystick to enter it and score points. When you reach the time limit it's back to the main *Lettris* game.

The supplied dictionary makes it easy to score because many unlikely combinations are allowed. However, your plans for a large, high-scoring word are often defeated by 'UN' or 'ETC' wiping valuable letters from the grid. Nevertheless, *Lettris* is a smashing little game which will amuse both young and old.

STF RATING: 76%

BONUS GAMES

Molecule

This puzzle game is a cross between *Battleships* and *Minesweeper*. It comprises a square grid with buttons for each row and column, and you have to work out where the molecules are by noting the response to each button.

When you click a button, it sends out a beam which may be blocked or deflected if it hits a molecule. All you're told is whether your beam is bounced, blocked or allowed to continue to the other side of the grid. The more buttons you click, the easier it is to work out where the molecules are.

When you think you have spotted a molecule, click on the grid to mark your guess, then continue to the next one. Your choices can be changed at any time, but all this takes place against the clock. Happily, the time limit is reasonably generous.

Molecule is a fascinating game which can keep you intrigued for hours. Its inclusion makes this compilation disk superb value for money.

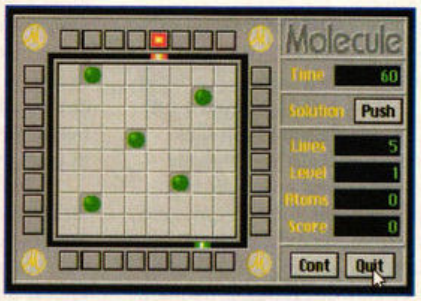
STF RATING: 75%

Whist

The ancient game of Whist lives again in this one-player version. It's just you against the computer and, for once, it isn't rigged so that the computer always wins – quite the opposite. The cards are loaded in your favour, because you get to choose trumps after you see your hand.

There are absolutely no frills here: each game stands alone and the program doesn't keep a record of who won. It's a shame the author didn't do a bit more work and add extra players and variations on the Whist theme. As a disk filler it's great, but don't expect too much from it.

STF RATING: 61%



Molecule: You click on the buttons and guess where the atoms are hidden. It's like *Battleships* and *Minesweeper* all rolled into one.

SteStosTerone demo

Floppyshop, disk DEM5336c
All 1Mb STEs (TOS 2.06 requires a *STOS* fix utility)

The *SteStosTerone* demo leaves a lot to be desired. Some pulsating graphics would have been nice...

This disk is a collection of four demo screens, all in praise of a diskzine called *SteStosTerone*. The diskzine is not included, although the doc file indicates that it is packed full of *STOS* demo coding hints and tips. After a welcome screen which runs from your Auto folder, you need to load the main demo menu from your ST's Desktop.

The menu screen looks like a horizontal space shoot-'em-up, and all you do is fly your space ship into one of the four bouncing demo icons. Sadly, they're all pretty boring affairs with no scrolling text. The screen itself bounces around a little and there is some text advising you to buy *SteStosTerone* diskzine. None of the screens are the least bit inspiring, but the MOD files, at least, are great.

STF RATING: 39%

Observer

LAPD, disk U76
All STs

Observer is a great document displayer which works in all three ST resolutions. As well as displaying text, it also displays pictures in many common formats, including PI?, NEO and SPC.

Three fonts are available, in addition to the standard Atari font. These fonts are built into the program, so you don't need to have *GDOS* or *NVDI* loaded. If you aren't using a replacement desktop, there's even an installer which patches your DESKTOP.INF file so that *Observer* launches when you click on a supported picture or text file. Another splendid feature is the ability to deal with Macintosh and *Unix* text files.

This tiny document displayer also handles many picture formats.

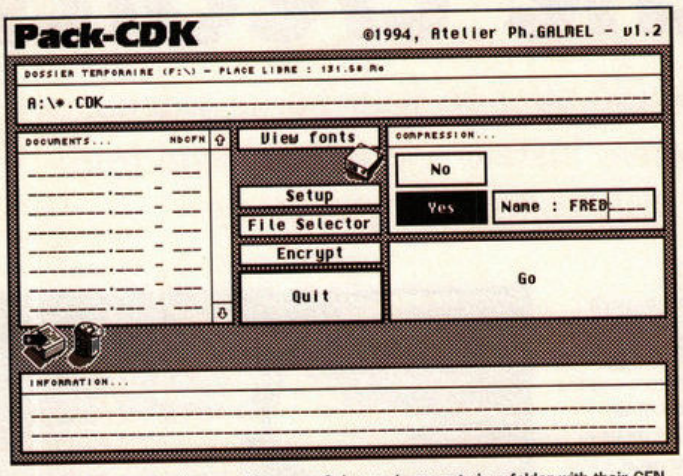
Once loaded, the documents can be browsed by simply dragging your mouse up and down. If the document is large you can turn on the exponential mouse routines which scroll the text more quickly the faster you move your mouse.

The program is tiny, the features are extensive and it's postcard-ware. We approve.

STF RATING: 89%

www.stformat.com

Calamus Utilities



Pack CDK automatically assembles your *Calamus* documents in a folder with their CFN fonts. You then have the option of archiving and even encrypting them.

Floppyshop, disk UTL4944
All Ataris

This disk is packed with ten utilities and numerous text files designed to make life easier when using the famous ST DTP package, *Calamus*. There are French, German and English files included in the package, with varying degrees of English translation.

Font Scale is an Accessory which facilitates proportional resizing of text boxes. It fixes a bug in *Calamus* which prevents true proportional resizing, even when this feature is turned on. The Accessory tells you exactly how to resize the box numerically.

JC CFN View is an excellent *Calamus* font viewer. It's very useful for seeing which characters are actually present in a font. If you need a pound sign, for example, you can save yourself the hassle of loading the font into *Calamus*, only to be disappointed.

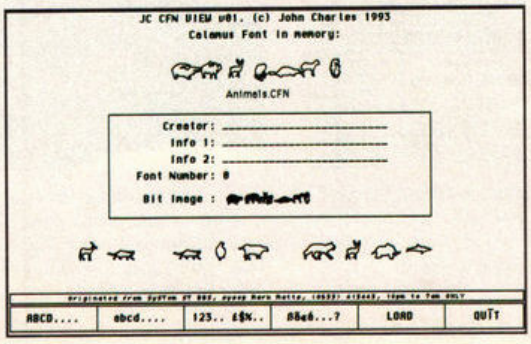
Pack CDK is a French program which stores your *Calamus* documents and all their associated fonts in one archive or folder. *Lharc is* supplied with the program, together with a self extracting archive convertor. The system is great to use if you need to give someone one of your *Calamus* documents in a completely self-contained package. There is even a facility to encrypt the archives for added security. The program is in French but English documents explain all the tricky bits.

The *Calamus S* and *SL* fix is a patcher program to fix compatibility problems with the *MagiC* operating system. *Calamus* was never designed to run within a multi-tasking environment, but this patch gets your *Calamus* setup working fine under *MagiC*. Remember to only patch a copy of your *Calamus* program, rather than the original.

Finally, there is a collection of documents from the worthy Calamus User Group. These are packed with hints and tips on how to get the best from the program. If you do nothing else with this disk, read these help files.

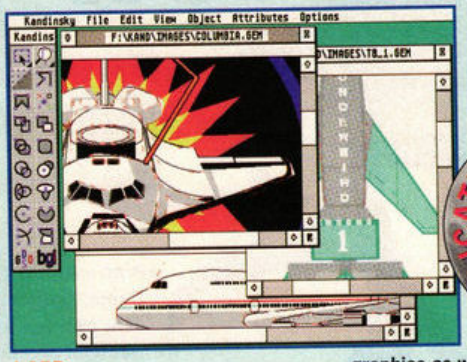
Despite the inaccessible German programs, this disk is a gold mine for *Calamus* users, especially if you don't already have any of the programs.

STF RATING: 90%



JC CFN View is probably the best *Calamus* font displayer. You can check out each one before you decide whether to use it.

Kandinsky 2.03e



Kandinsky, shown here on a Falcon, brings you colour vector graphics even on your humble ST.

LAPD
All Ataris

Kandinsky is a full-colour vector drawing package for your ST, Falcon or TT. It's packed with loads of wacky vector drawing tools, although many of them are unavailable in the shareware version. Your masterpieces are saved as GEM metafiles, but can be readily converted to bitmaps for retouching using *GEMView*, also available from LAPD. The registered version can export illustrations in *Calamus* Vector Graphic, TEX and even Postscript formats.

Kandinsky only costs £30 to register in the UK, making it exceptional value for money. When compared to packages like *Arabesque* (see page 20), *Kandinsky* holds its own very well, particularly as it handles colour, whereas *Arabesque* only works in mono. *Arabesque* wins out mainly because it handles bitmap graphics as well as vectors.

The program provides everything you need to create professional looking scalable images with all the usual Bezier curves, lines and polygons. It also makes good use of the right mouse button – clicking it completes any drawing operation. All objects remain editable, so that can achieve pinpoint accuracy in your graphics, even if your initial sketch is quite rough.

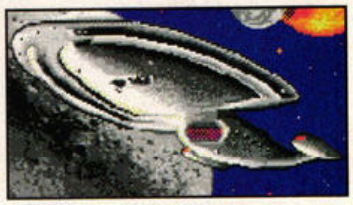
Kandinsky runs in all ST resolutions, although the menu display is a little flaky in ST Low resolution. The program's compatibility across the Atari range is highly commendable.

It's rare for such a useful and accomplished piece of programming to be available in the public domain. There are limitations, but the shareware version gives you a superb entry into the world of vector graphics.

STF RATING: 93%

Warp 5

Floppyshop
All Ataris



The latest edition of *Warp* is packed full of great articles keeping you up to date with happenings in the *Star Trek* universe.

Issue five of *Warp* is up to its usual high standard, bringing news, spoilers and features about *Star Trek* in all its forms. This issue includes some exclusive revelations about the new *Star Trek: TNG* movie, *First Contact*. There's a full cast list as well as a fairly complete synopsis of the plot. It also features an interview with Kate Mulgrew (Captain Janeway from *Voyager*) and reviews of the latest *DS9* and *Voyager* episodes. There's lots to read and the minimum of annoying *Star Trek* samples.

The user interface doesn't use a standard document displayer. Instead, it has a custom-written *Star Trek*-style computer interface which works well and looks great. There's nothing trivial about the features, which have been carefully thought out and well written by people who really know the *Star Trek* universe. A selection of the best bits is included from the Internet newsgroups for those who balk at the thought of wading through the vast amounts of *Star Trek* information contained therein.

It's a great read and well worth the money, so ahead *Warp* factor 5 (sorry).

STF RATING: 84%

www.stformat.com

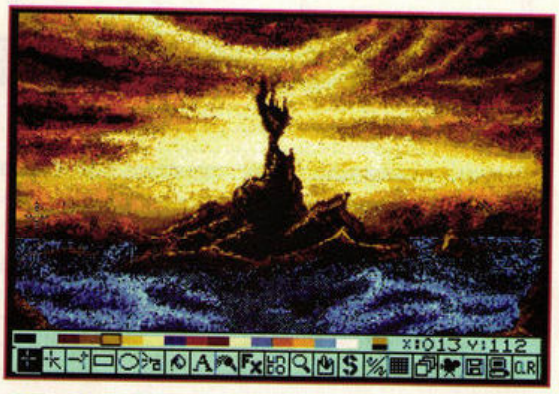
Roll the credits

It's easy to add titles to your home videos. Frank Charlton installs *Video Supreme* from the Cover Disk and shows you how.

Most of us have access to a video recorder, and camcorders are becoming almost as popular. Even if you don't own one, chances are you have a relative who does. Some shops and local libraries will even let you rent one for a few days. Once you've shot and edited your footage, there's only one thing remaining to give it that finished look – some swanky credit sequences at the beginning and end.

Video Supreme from this month's Cover Disk makes video titling an absolute doddle. It takes static images and strings them together, using a variety of attractive effects in between. Add the ability to assign a sound sample to each frame, and you've got an excellent package which can produce smooth and impressive results.

Unless you're content to recycle images from PD disks or bulletin boards, you'll need a few bits and bobs before you start your presentation, including an art package which works in the standard 16-colour ST low resolution (320 x 200). The ST is probably blessed with more freeware and shareware doodling programs than any other computer, and all of them will be adequate.



Deluxe Paint works exceptionally well for both image and text screens.

If you want to create really sparkling presentations, though, you'd be advised to opt for one of the more all-singing packages. Since you'll be using text in your images, go for a program which has both good text handling tools and a wide range of different fonts. Some packages support the *GDOS* font standard, so you'll find plenty of typefaces in the PD.

For really impressive screens, packages such as *Deluxe Paint* from Cover Disk 77 use their own fonts, enabling you to create multi-coloured headings. The utterly superb shareware program *CrackArt* also supports a colourful font format, and any standard PI1 or NEO screen can be converted. *CrackArt* also provides some excellent special effect tools which can slant your type along different paths, or even warp it around an invisible bubble. Nice.

Once you've put your screens all together, make sure you save them in either *Degas* PI1 or *NeoChrome* NEO format, so *Video Supreme* can read them.

Sounding off

To add sounds to your shows, you'll need a sampler or a collection of generic samples from a PD library. If you own STOS Maestro, you're in luck, because the

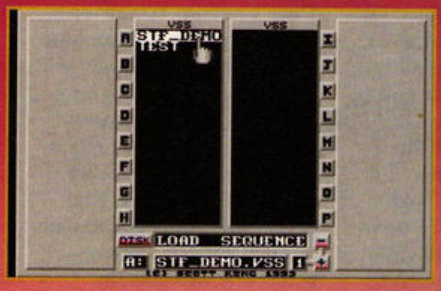
CrackArt is a superb shareware art package which can produce some smooth special effects to enliven your title sequences. It needs 1Mb to run, though.

INSTALLATION

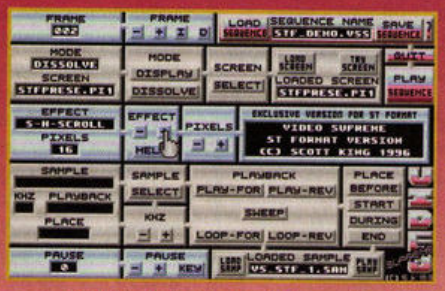
It's quite simple. Using the step-by-step guide from page 7, copy VIDSUPRM.TOS from your Cover Disk on to a blank disk or into a folder on your hard drive. Double-click on it to dearchive the contents, then delete VIDSUPRM.TOS from your disk.

To run *Video Supreme* from floppy disk, just auto-boot with it in drive A. To run it from hard drive, open the Auto folder and double-click on VS1_STF.PRG. It's that simple!

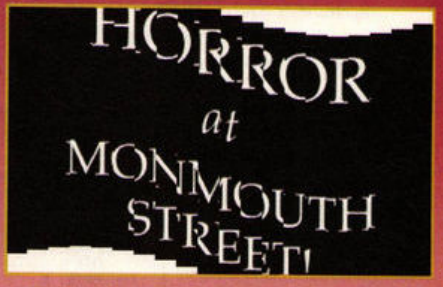
CREATING A SEQUENCE



1 The quickest way to learn sequencing is to load the demo and change it to fit your needs. After loading, delete all frames except the first, by advancing each frame and using the D button.



2 Click the Select button in Frame Controls to load a picture from disk, in either NEO, PI1 or *STOS* MBK format. Next, click the Load Frame button to store it in *Video Supreme's* memory.



3 Each frame can have an effect applied to it – step through them using the [+] and [-] buttons, using Test Frame to see how they look. Pause each frame for a few seconds using the time controls.

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THE REAL THING

The Cover Disk's *Video Supreme* is a slightly cut-down version of the full package. All of the tools work, but you're limited to a maximum of 20 frames per presentation, instead of 200.

You can pick up the full version of *Video Supreme* from Goodmans for just £7.95. Also available is *ScreenMaker*, which makes text screens for use in *Video Supreme*. That also costs £7.95 or you can buy both for just £12.95. Also on offer is *Video Supreme 2* for £19.95 and a newer version, *Video Supreme 2+* for £24.95. Post and packing is an extra £1.25 per order. Make cheques payable to Goodman International – call ☎ 01782 335650 for more details, or read VS_©SK.DOC.

ANYTHING ELSE?

Even if you don't need to use *Video Supreme* to add titles and credits to your own home videos, you can still have fun with it. For example, you could create a multimedia 'letter' to send to a friend or family member.

You'd simply use *Video Supreme* to create a sequence, just as if you were constructing a credit sequence as we did below. Build up your collection of images and sounds, string together the letter, and output it to a blank videotape. Surprises like this get a great reaction – they're far more fun than a simple letter, and make novel presents to give for birthdays or Christmas.

Create "hilarious" sequences to annoy your editor and ensure you never work for *ST FORMAT* again.

SAM format is supported directly by *Video Supreme*. If you have samples in other formats, pick up a copy of the shareware utility *525*, which will happily convert almost any sound format. Don't forget, we covered sampling in detail back in issue 82. Copy your sounds and static screens into the relevant folders ready for *Video Supreme*, and get to work.

Once you've designed your static screens and collected them together with your sound samples, you're ready to start constructing your presentation. The heart of your *Video Supreme* production is simply a linear sequence of still images played one after another, with different effects applied to produce some smooth and striking transitions between frames.

Video Supreme is an excellent package which can produce smooth and impressive results.

The key to producing presentations is to remember that a *Video Supreme* slideshow is made up of two basic stages, which are repeated as many times as you like. The first stage displays a static image, which is covered in step 2 of the Creating A Sequence walkthrough. Before you load an image, you need to tell *Video Supreme* that this is the first basic stage – the display stage. Clicking the Display button does just that.

The second stage is the transition to the next image. You add this just as you added the first, except that you use the Dissolve button instead. Note that the transition

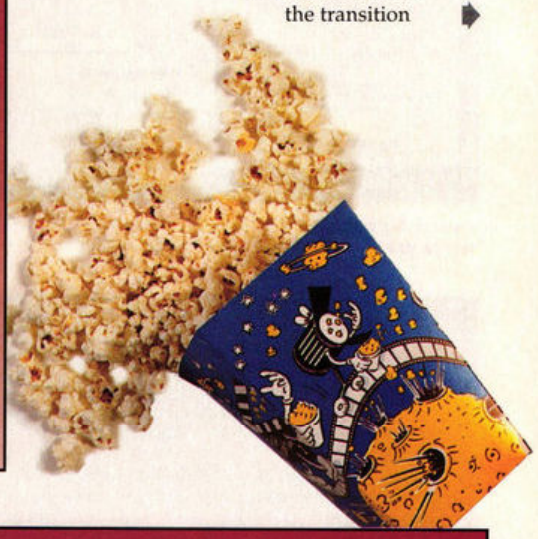
ON THE FALCON

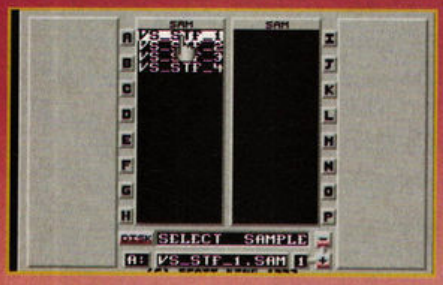
The Cover Disk version of *Video Supreme* needs to be fiddled with slightly before it will run on a Falcon. Don't worry – it isn't time to drag out that old copy of *STOSFix* again, because *Video Supreme* author Scott King has made sure that it runs with TOS 4.

In this case, the problem lies with the packer used to reduce the size of the *Video Supreme* program itself. It's an older version of the *Atomik* packer we mentioned in the Big Squeeze feature back in issue 77, and the unpacking code isn't happy on the Falcon. To get a working copy, you'll need one of the 'unpacker' programs available from any PD Library or BBS, such as *MegaDepack* or *NewDepack*.

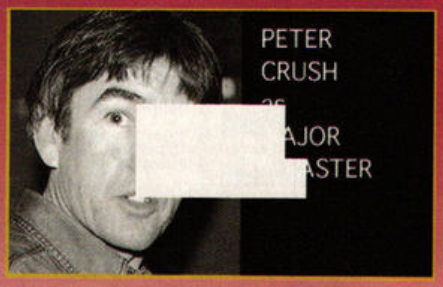
Follow the instructions supplied with the utility to unpack and save a new, uncompressed copy of VS1_STF.PRG. Voila – an instantly Falcon-compatible version. If you want to repack it to save disk space, you'll need a Falcon-compatible packer such as the fixed version of *Atomik 3.6*.

Packers are handy when it comes to reducing disk space, but sometimes you need to uncrunch programs before they will run on the Falcon.

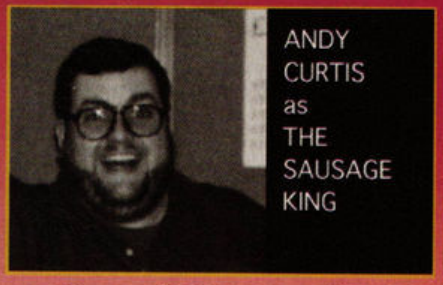




4 Next, assign a sound sample to each frame using the same procedure as step 2. Select from the file selector, then click the Load Sample button to bring it into *Video Supreme's* memory.



5 You need an effect after each frame to progress to the next one in the sequence. Set it up as you did in Step 2, but click Dissolve rather than Display to create a wipe effect like the one here.



6 Keep repeating these steps until you have a full sequence, then step back to frame 1, and click play. The screen will go black – press the Spacebar when you're ready to play the sequence.

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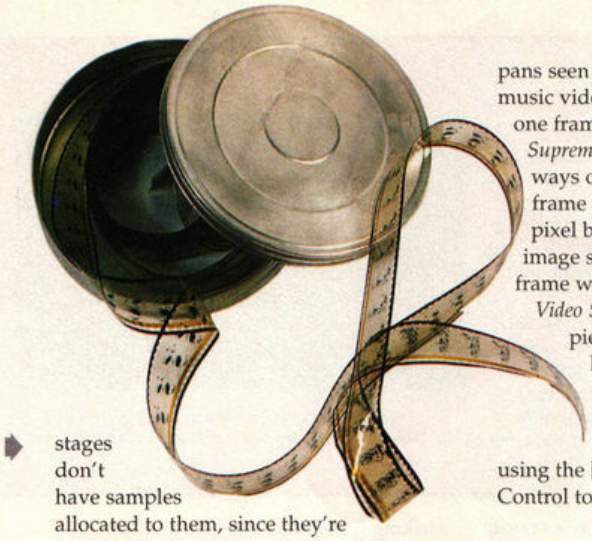


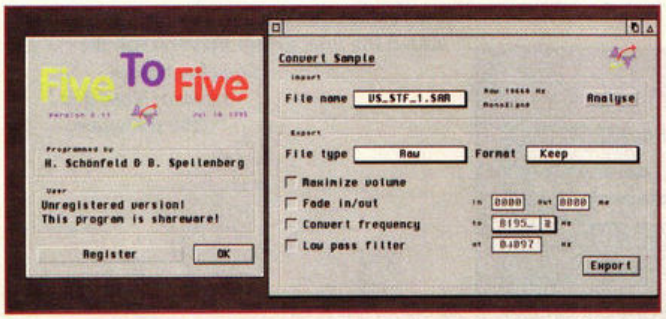
stages don't have samples allocated to them, since they're merely mid-points between two display frames. So, each presentation consists of a displayed image, followed by a transition. Repeat the two stages as often as you like, and you have a presentation.

Adding effects

If each frame of your show was immediately replaced by another, it would soon get pretty boring. *Video Supreme* lets you use the ST equivalent of the wipes and pans seen in 'real' video work such as music videos. All you're doing is replacing one frame with another, but *Video Supreme* gives you lots of different ways of doing this. You can make one frame dissolve smoothly into another pixel by pixel, use wipes where one image slides over another, or replace a frame with another using larger blocks. *Video Supreme* offers some nice set pieces as well, such as the Lightning effect, which flashes the screen with streaks of digital lightning. The key here is to experiment – set the effect using the [+] and [-] buttons in the Effects Control toolbox, and click the Try Frame button to see how it looks before committing yourself to it.

Video Supreme lets you use the ST equivalent of the wipes and pans seen in 'real' video work.

Even if you're not the most artistically inclined person in the world, there's something you can add to your presentations which can improve the most mundane slideshow, namely sound. By choosing your samples carefully, you can augment most of the visual transformations between your sequence frames.



If you're fiddling with sound samples, you need 525 – unless you happen to enjoy tearing your hair out with frustration, that is.

FRANK CHARLTON as EDDIE WIBBLE, THE TOKEN THUG

You can create some smart credit sequences using digitised photos.

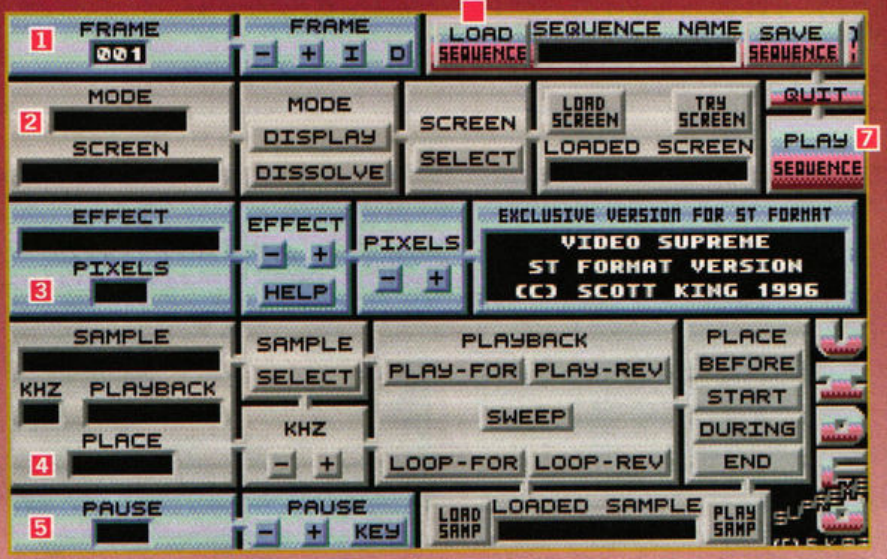
Load up the demo file supplied with *Video Supreme* and take a look to see what we mean. One frame uses the lightning transition we mentioned earlier to great effect, simply by adding the sound of a thunderstorm to the frame. Some of the other effects, such as Bounce, work really well when combined with a cartoon-like 'Boing!' effect. Others work well with gothic door creaks. Thinking carefully before you assign a sample will improve the overall effect tremendously.

Obviously, you don't want each one of your carefully crafted frames to fly off the screen in the blink of an eye, which is where the pause controls come in. Using the [+] and [-] buttons, you can tell *Video Supreme* to either move to the next frame as soon as it's loaded, hold it for a specified number of seconds, or wait until a key is pressed. Experiment with different time values here, making careful note of how long your sound samples play for – you don't want a frame to be over while the sound is only halfway through.

Now we've shown you what *Video Supreme* is capable of, you'll probably be really eager to get hold of the full version, or even the more powerful *Video Supreme 2*. See The Real Thing panel on page 31 for more details. ***stf***

VIDEO SUPREME CONTROLS

1 Frame Controls. The current frame number is displayed, and the icons move you backwards and forwards between them as well as inserting and deleting frames.
2 Screen Controls. Here you select and load screens and specify whether they're to be displayed or used as dissolve effects.
3 Effect Controls. Here you choose an effect to be applied to the current frame, and tweak the range of the effect using the Pixel [+] and [-] icons.
4 Sample Controls. Load and select sounds from disk, set the playback rate and duration, and specify how each sample should be played.
5 Time Controls. Set whether a frame should be displayed quickly, for a specified amount of seconds, or until a key is pressed.
6 Disk Controls. As well as loading and saving sequences, left-clicking the [?] icon displays free disk space, and right-clicking it lets you delete sequences from disk.
7 Plays the current sequence. Make sure you step back through to frame 1 using the [-] button before you play your sequence, however.



Each section of *Video Supreme's* editor is grouped together with other related items. Any related toolkits are linked with lines between the boxes, and they're colour-coded, too – notice how the sample tools are all linked, and all shaded grey for example. Keep this simple guide handy as you work, and you won't go far wrong. Unless you're colour blind of course.

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ST Answers

For one final time, Frank Charlton is the ointment you need to soothe your ST troubles. Mac Marsden stands by with Bandaids and a big handkerchief.

PORT-ABLE

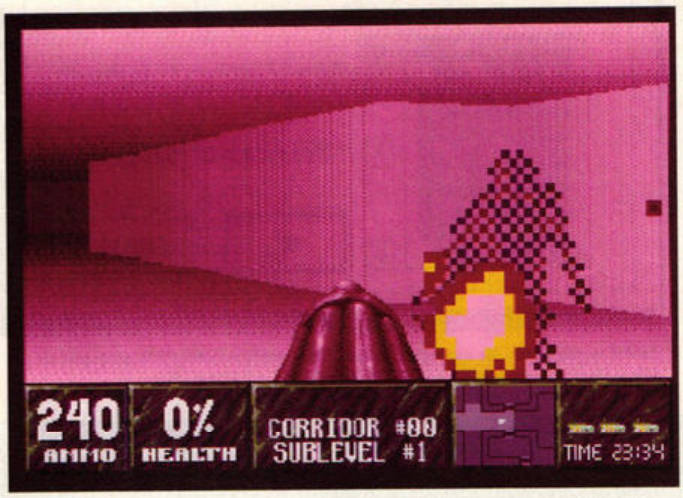
Q I own an Atari 520STE with 4Mb of memory and an IBM Aptiva Pentium PC. I am thinking of buying an Iomega Zip drive to back up my PC's hard disk and to transfer files between my PC at work and my PC at home. As this drive is only going to be used once in a while, I also want to use it as a hard drive for my ST.

Ideally, I would like the serial port version (which makes it easier to move the drive between machines), but I do not know if this is compatible with the ST. Have you used these drives, and is it possible to use one as I want?
Nic King, via e-mail

A *Unfortunately not, Nic. The specially adapted version of the Zip drive is sold only for PC use. It uses the parallel port, by the way, rather than the serial one, and Iomega provides special PC-specific driver software. No such drivers exist for the Atari.*

It's also technically impossible to use it this way on an ST, because Atari's implementation of the parallel port isn't truly bidirectional. The Falcon's parallel port is, so it might be possible to use one of these drives with that machine, but we don't know of any plans to produce the necessary software drivers.

Your only hope for real cross-platform portability would be to fit SCSI cards into your home and work PCs and buy the ST-friendly SCSI Zip drive.



SubStation is a great game, and it's even better against a human opponent. Unless it's Nick, who keeps creeping up behind you and blowing your head off.

WITH CHIPS

Q Am I right in thinking that chip music, such as the tunes composed by Mad Max, is freely distributable? Can I use this music in my games without having to pay a royalty?

I gather that this is not the case with MOD files. Are there any MOD files that I can use in my *STOS* games without needing permission? And are there any other restrictions preventing me from releasing games into the public domain?
James Arthur, Witney

A *This is a bit of a copyright grey area, James. Legally speaking, the copyright for each piece of chip music remains with the author unless he specifies otherwise, by truly releasing it into the public domain and relinquishing his rights. Even if the composer left the Atari scene long ago, the tunes don't just 'become' PD.*

I realise it may seem as if a lot of chip music is copyright free, because the proliferation of 'ripper' programs and cartridges a few years back meant anyone could swipe a piece of music, whether it be from a commercial game or a demo. In fact, a lot of old ST demos used tunes which were originally written for games.

Exactly the same restrictions apply to MOD files – or any file, for that matter – unless the author states that anyone can use it. We suggest you contact some of the demo crews and ask if you can use their music. Check out the Atari Net Locator (see the alt. comms.stf@ panel on page 36), which includes addresses for the Web sites of several demo crews.

As for other restrictions on your games, there aren't any as long as it's all your own work and doesn't use copyrighted graphics or samples. If you need further advice on releasing PD games, we suggest you contact LAPD, a library well known for helping aspiring PD authors. Drop an e-mail to Leigh at: leigh@lapd2.demon.co.uk *and tell him we sent you.*

FUN FOR TWO

Q I have some questions: **1** Can you list ten two-player games for the Atari? **2** What kind of link do

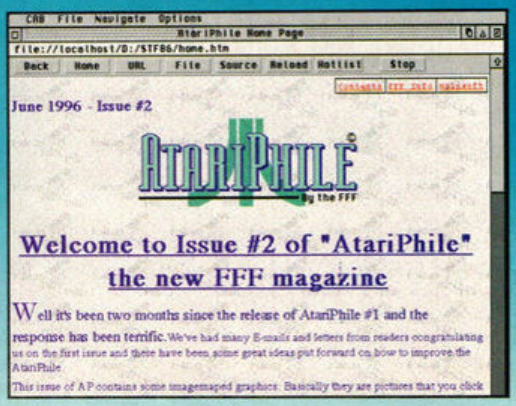
END OF AN ERA

By now you'll know that this is to be the final issue of *ST FORMAT*. We're as sad about this as you are, especially as we won't be here to help you along with ST Answers any more. Mac and I would like to say thanks to everyone who took the time to write with queries, and especially to those of you who sent tips and solutions in response to questions we weren't sure about.

Where do you go for help now? First, the diskzines. Well-written journals such as *AtariPhile* and *Maggie* always need your support, and also provide an excellent way of staying in touch. Alternatively, pick up a cheap modem and connect to the Internet or one of the superb ST bulletin boards, such as Ad.Lib or 42 BBS. Use your on-line time sensibly and your phone bill won't go through the roof. You'll also become part of a thriving community which can provide friendship and support long after we've gone.

You'll still find many of us fighting the ST's corner, both on-line and in the diskzines. Don't feel too despondent about the future of your ST – do something about it, and we'll see you out there. As always, you can e-mail me at: de18@dial.pipex.com.

Frank Charlton



Stay in touch with fellow ST users via some of the excellent disk magazines, such as *AtariPhile* – also available on-line.

You can use password programs to lock your ST, but there's always a way to bypass them... so it's better to just hide some of the cables.

you need for two-player games? 3 Do the Ataris used for two-player games have to be of the same breed?
John Stewart, Elgin, Scotland

A *I have some answers:*
1 *Er, not off the top of my head, but here goes:* Falcon, Populous, Populous 2, Stunt Car Racer, SubStation *(all commercial)*, MIDIMaze, Cold Revenge, *and er... I've dried up. There are plenty more, I just can't think of them.*

2 *It depends on the game. Some use the ST's MIDI ports along with a cheap MIDI cable. Both* MIDIMaze *and* SubStation *are examples of this type. Others, including* Falcon, *use a null-modem cable attached to the modem ports of the two STs.*
3 *Nope, as long as the game in question actually runs on different machines.* SubStation, *for example, will happily network between an STE and a Falcon. We've played a lot of games like this, and Nick cheats* (One more remark like that and you're sacked – Nick). *However, this doesn't work with an STFM, because the game doesn't run on the older machine. You need to check the game's documentation to see if it needs a specific machine to run, but playing between an STFM and an STE can and does work.*

CAREERS

Q Hello. I'm 13 and next year I've got my options. I would like to know what GCSEs you need to work with computers. Do you have any idea?

Also, what does Mailshot do on *Oasis 1.31E*?
Stuart Shaw, via e-mail

A *To be honest, Stuart, your Careers or Computer Science teacher would be a better person to ask. It's been, er, 'a few' years since I left school, and things have changed quite a bit.*

It also depends what area of computing you want to get into – programming jobs need specific qualifications from University, whereas being a computer journalist requires a good standard of written English, along with the ability to work to deadlines, go for weeks without sleep and answer e-mail at all hours of the day and night – that's what it feels like, anyway! I'd hate to advise you wrongly, so check with your teachers. Good luck with your career, whatever you decide.

As for the Mailshot feature in OASIS, *it enables you to send the same piece of e-mail to more than one recipient without actually sending more than one copy of the message, and it's explained fully in the* OASIS *documents.*

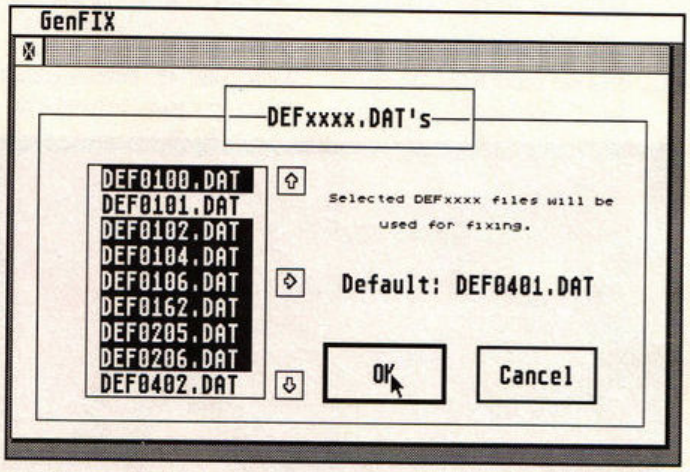
INSECURE

Q I am fed up with my brother using my ST whenever he wants to. I would like to know if there is any way I can put a password window in my ST before the Desktop appears?
David Leach, Strood

A *Yep, there are a few ways you can effectively shut out your sibling. However, with a little technical knowledge, he could bypass most password security software, so make sure he doesn't read this!*

If you don't have a hard drive, you need to add one of the various security programs, such as OCULTAR, *to the Auto folder of your boot floppy disk. Unless your brother knows the password, your ST won't reach the Desktop. The snag is that he can eject the disk and re-boot, and after a while the Desktop will appear. There's little you can do about this.*

If you leave your ST on while



GenFIX is marvellous for sorting out compatibility problems with *STOS* programs on newer Atari machines (see LOST STOS), but it isn't a miracle worker.

GFA WORKSHOP with Mac Marsden

GRAPHICAL ERRORS

Q When I use GRAPHMODE 3 and attempt to draw a rectangle using BOX x1, x2, x3, x4, the pixel in the upper left corner is not shown. Why not? Is there anyway in which I can make the BOX statement draw it in, so that my boxes are complete?
Michael James, Wembley, London

A *Michael, I am afraid that if you are using* GRAPHMODE 3 *with the* BOX *statement then the pixel in the upper left corner will not be drawn – this is just the way it is. Actually it is drawn twice, and in* GRAPHMODE 3 *this means the pixel disappears.*

The quick way around this is to use PLOT *to draw it in.*

```
! Example replace missing pixel
GRAPHMODE 3
BOX x1, x2, x3 ,x4
PLOT x1, x2
```

This is a tad messy, but it works.

TOUCH ME!

Q Is there any way I can alter the date of a file on disk, so as to indicate the date when the file was accessed and altered.
Mark Marsdon, Scarborough, Yorkshire.

A *Mark, the command you are looking for is* TOUCH. *You will need to open the file you want to alter, use* TOUCH, *and then close the file afterwards.*

```
! Example TOUCH program
OPEN "I", #1, filename$ ! open file
TOUCH #1 ! alter date
CLOSE #1 ! close file
```

DO I EXIST?

Q Is there a way to check that a folder is actually on disk? There will (should) be files inside the folder, but I am not interested in whether or not they are there.
Pamela Errington, Washington, Tyne and Wear

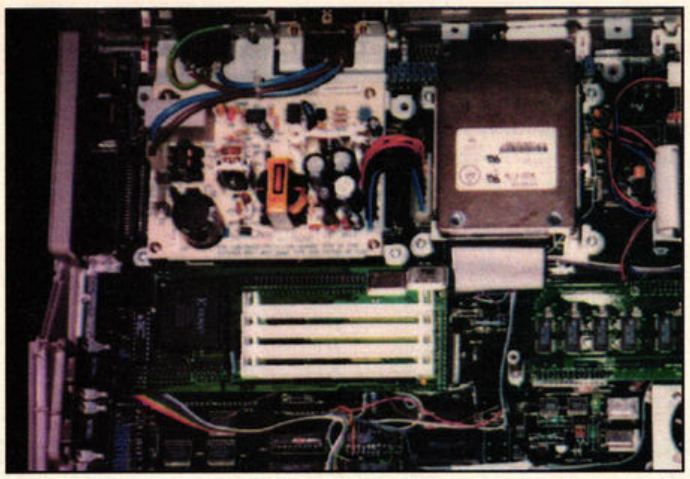
A *Pamela, you can use the command* EXIST *to determine whether a folder exists or not. This is only effective if there are files in the folder, but this can be used to your advantage:*

```
! Example test for existing folder program
IF EXIST ("\folder\*.*") ! look for files
   ! your program here (folder found)
ELSE
   ! your program here (not found or empty)
ENDIF
```

MEMORY OVERVIEW

Q Could you possibly provide me with an overview of the way memory is arranged in an Atari ST machine?
Walter Praid, Surrey

A Walter, if you look at Panel One you'll find the low-down on the Atari memory. The BIOS system-variables &H400–&H4FF are 'cast in concrete' by Atari and should be avoided.



An IDE drive, sat happily in a Falcon. You can't just connect one to your ST, though – IDE drives were designed to work with PCs, and you don't have the right hardware.

you're out, an XControl *CPX extension called* LOCK *enables you to effectively 'freeze' your ST until someone enters the password – see last month's Control is Everything feature for more details. He could still re-boot the machine without the boot disk, though.*

Probably the only secure method is to hide the ST's power lead, monitor cable or mouse while you're out – that should certainly stop him in his tracks.

Contact any PD Library for password software. 16/32 is in your home town – call ☎ 01634 710788 for more information.

LOST STOS

Q I have a new 1040STE with a non-switchable TOS 2.06 upgrade, and a *STOS* fix program which enables me to use my *STOS* programs. Everything works fine, except for *STOSCOPY*. Could you please tell me if there is a way to make it work, and if there are any *STOS* clubs in the UK?

Also, how can I print a *STOS* listing with the LLIST command to my Hewlett Packard DeskJet 600 printer?
G Symons, Somerset

A *We've also tried to get the* STOSCOPY *program to run on a TOS 2.06 STE – without success. To be honest, I wouldn't worry about it too much, because* STOSCOPY *is probably the least used part of the entire* STOS *suite – it just creates a new copy of* STOS *on another disk. You can do this manually if you need to, anyway.*

As for dumping STOS *listings to the printer, it's possible, if a little convoluted. The built-in printer routine only seems to support a 9-pin Epson-compatible printer, so using* LLIST *with a modern inkjet produces garbage on the page. All you need to do is save your listing as an ASCII file from within the* STOS *interpreter, then load it into a text editor or word processor which supports your printer.*

We don't know of any STOS *clubs offhand, but you might like to drop a line to Harry Sideras at the Association of Atari User Groups. Write to him at: 49 Haywood Rd, Tile Cross, Birmingham, B33 0LJ.*

DAISY, DAISY

Q I recently bought a Brother HR-20 daisywheel printer. I've used all sorts of driver disks, but all it does is print total rubbish. It has buttons on the back to change baud rate, language, 7-bit to 8-bit and so on, but I received no manual.

Also, when I turn the printer on and connect the printer cable to the computer it makes a low buzzing noise.
Daniel Budd, Wakefield

A *Oh dear. Judging by the fact that you mention a 'baud rate' button, I suspect there's a very strong possibility that the printer is meant to use a serial connection rather than the parallel method used by your ST's printer port. While all modern printers use parallel connections (with the exception of printers for the Apple Mac), a lot of older printers, and daisywheels in particular, used serial connections. Unfortunately, Daniel, it's very doubtful that you'll ever get this printer to work with an ST.*

Rather more worrying is the buzzing noise you mention. I recommend you don't connect the printer to the parallel port any more, because this could well damage your ST. If anyone knows of any drivers for the HR-20, please do get in touch and we'll pass the information on to Daniel. I'd leave this printer well alone for now, though.

IDE NO-NO?

Q I have recently been offered an 80Mb IDE hard drive for a nominal amount (it's just the bare drive), and I was wondering if it was possible to connect it to my existing hard drive. I have a 4Mb MegaST and a Vortex 32Mb hard drive.

Will I just be able to add a jumper lead – that is, a lead to supply power to both drives – or will I need additional hardware and software to make it work in my machine?
A Clemons, Etchingham

A *Nope, I'm afraid not. The IDE drive system was invented for the PC architecture, and the ST doesn't support it. There were a few boards available to connect IDE hard drives to your ST a while back, but we never actually saw one, and we don't know if they're still available or supported. The Falcon was the first Atari machine to offer an IDE interface, so it may be worth it if you're thinking of upgrading to the '030 machine. Otherwise, it certainly isn't a bargain.*

MONITOR LIZARD

Q I have an STE and recently acquired a second-hand mono monitor. There are no instructions and the label on the back of the monitor is missing, so I wasn't able to glean anything from that. However, I did manage to fire it up.

All I can tell you is that the signal input is via a 6-pin DIN socket, and that the manufacturer appears to be ARC. I have the pinouts for my STE, can you please fill in the gap?
Rob Torr, Ilford

A *With so little information to go on, it's difficult even to work out what kind of monitor it is, let alone provide connection details for it. I had a chat with a PC-owning monitor tech friend of mine, and he says the ARC name and the 6-pin plug suggest that it's probably an old Hercules-compatible mono display from way back. These monitors use TTL signals, and he thinks it will be impossible to hook it to your ST's composite video or RGB outputs.*

1101010110101

Q I'm a young, keen computer programmer, and I'm starting to learn a new language – assembly language machine code. I was wondering if it would be possible for you to recommend any good books for an absolute beginner working with HiSoft's *Devpac 3.1* assembler on the STE.

Also, I remember you doing A Bytecruncher's Guide to Assembler a few years back in *ST FORMAT*. Could you tell me how I can purchase the

PANEL ONE

Overview of the memory of an 1040ST

	Address	Description
	&H FFFFF	Top of memory
	&H FFD00	767 unused bytes
XBIOS 2	&H F8000	Screen memory (32,000 bytes)
HIMEM	&H F4000	16384 unused bytes (MALLOC(-1))
	&H ...	Free memory (length FRE(0) bytes)
	&H 388EA	Program variables (length varies)
	&H 10C2E	*GFA Basic 3.07* interpreter
BASEPAGE	&H 10B2E	Basepage (256 bytes)
	&H A100	Start of available RAM
	&H 6100	Global AES variables
	&H 29B4	Global BIOS and GEMDOS variables
L-A	&H 293A	Line A variables
	&H 93A	Local BIOS variables and BIOS stack
	&H 400	BIOS system variables
	&H 0	Exception vectors

ASCII files and articles from the magazine, because I didn't keep them when I thought I'd stay with Basic.
John Crossley, West Ealing

A *To answer the last one first, we can't sell you either the ASCII files or the back issues in question, because we don't have them any more. You might pick them up via the Reader Ads page, though.*

Sadly, most of the books dealing with ST-specific assembly language programming are now well out of print, but secondhand copies do turn up. Alternatively, your local library may be able to obtain loan copies for you.

One book which is still available is Roger Pearson's Introducing Atari Machine Code, *available for £9.99 from zzSoft (☎ 01254 386192). It's a little biased towards GEM programming, but it does introduce the fundamentals of 68000 assembly language at a level you should be able to cope with.*

RAW POWER

Q I have recently upgraded to an STE with 1Mb of memory, and would like to know the answers to a few questions I have about it.

1 Can I install a new processor, such as a Motorola 68030/40 chip, without upgrading the TOS? 2 Will increasing the memory make it run faster, as I have heard it does? 3 The PC divides memory into sections: conventional, expanded and extended. Does the STE use a similar memory management system?
Kevin Jones, Lowton

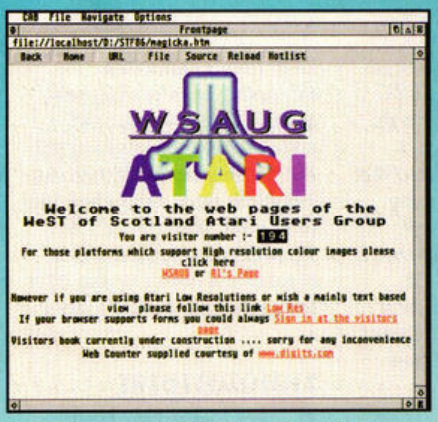
A *Okay, Kevin, here we go:* 1 *Not without the use of extra hardware. You can't just shove a new CPU in and expect it to work, unfortunately. However, you can give your ST the power of the 68030 processor with the aid of a replacement CPU and accelerator board such as the PAK boards*

ALT.COMMS.STF@ with Frank Charlton

Following on from issue 84, we're continuing our mini-reviews of the best of the Atari-related Web sites in cyberspace. All the sites we're covering here are worth a visit, and the overall winner of the *ST FORMAT* Web Gold award is guaranteed to be a site worth bookmarking and revisiting.

HOOTS MON!

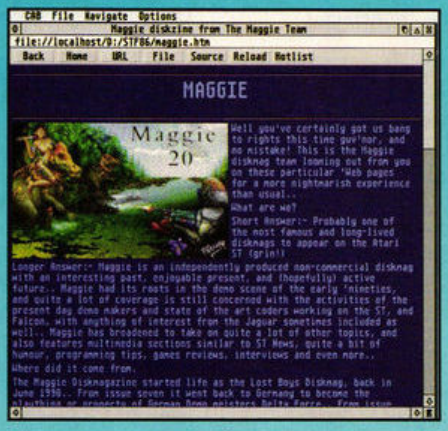
Page: WSAUG Homepage
What is it? On-line home of the West Scotland Atari User Group.
Where you'll find it: http://ourworld.compuserve.com/homepages/magicka/
What's it like? Not a bad little set of pages, even though some areas, such as the visitors' book, are still being constructed. Selecting the link for the book results in an error message from the Web server, though – a dummy page would be nicer. The Atari Links page is sparse, too, and the authors have 'adopted' the logo I did for Mark Smith's site without asking first. Tsk.
Upside: Fast loading.
Downside: Sparse, but worth checking again in a few months time.
STF Rating: 65%



It's good to see an Atari User Group getting its act together enough to get on-line.

OH MAGGIE...

Page: Maggie Homepage
What is it? Home of the *Maggie* disk magazine.
Where you'll find it: http://www.cybercomm.nl/~spostma/maggie/maggie.htm
What's it like? The design is striking, because the authors have moved away from the usual light background/dark text favoured by most Web boffins. *Maggie* is one of the longest-running disk mags for the ST and Falcon, a fact of which the *Maggie* team is justifiably proud. Here you'll find potted histories and titchy pics of the members, along with a comprehensive index of each and every issue up to *Maggie 20*. Some links to download actual issues would be smart, but the pages are on someone else's server, so space is probably tight.
Upside: Links to *ST News* and *DBA* mags, too.
Downside: Could do with more in the way of content and links.
STF Rating: 73%



Nice to see someone who isn't afraid to experiment with different colours on their Web pages, anyway.

BIRDS OF PREY

Page: Digital Media Falcon Stuff
What is it? UK Distributor of C-Lab's new Falcons.
Where you'll find it: http://www.digital-media.co.uk/falcon/clabfalc/index.html
What's it like? This is the place to go if you're hankering after more information about the new breed of Falcon machines. Digital Media is the UK distributor, and the site packs in as much information as you'll ever want about the Falcon Mk 1, 2 and X. There's a single lonesome photograph of the swish Mk X – a few more, especially close-ups, wouldn't go amiss. You'll also find links for Soundpool's digital audio hardware and software and hot new items from UK company Sunrise Electronics. D2D buffs in particular should drop in here.
Upside: Lovely page design, lots of information.
Downside: Needs more Falcon pictures.
STF Rating: 80%

ANL A-OK

Page: The Atari Net Locator.
What is it? Central Web resource for Atari owners.
Where you'll find it: http://www.walusoft.co.uk/anl/INDEX.HTM
What's it like? Great, that's what. Author Jonathan Nott has come up with a corker here – a single set of pages providing pointers to everything Atari-related you can think of on the Internet. As well as the obligatory sections listing other Web sites, you've got links to FTP sites, Usenet newsgroups, FAQs and an excellent database of clickable e-mail addresses covering the movers and shakers of the Atari community. A new feature is the Interview Spot, which features *Falcon FacTT File* and *AtariPhile* supremo Colin Fisher-McAllum in the June update. This is a very promising site, and is certainly one to visit on a regular basis. Full marks for everything.
Upside: Smart design and very comprehensive.
Downside: There isn't one, really!
STF Rating: 96%

Bookmark this site. Now. We mean it, stop reading and wake up that copy of *CAB*. What, are you still here?

WEBSITE ST FORMAT AWARD

CAST THE NET

Page: NetBSD/Atari Homepage
What is it? Home away from the workstation for the *UNIX*-like operating system.
Where you'll find it: http://www.netbsd.org/Ports/atari/index.html
What's it like? *NetBSD* is a freeware implementation of a *UNIX*-like operating system. It's similar to *Linux 68K*, and aims to provide *UNIX* functionality on a freeware basis. This is the stopping point for information on the Atari version, which needs a 68030 processor and an FPU to run. The site is packed with information for propeller-heads, but is as dry as sticks. Still, not many people do UNIX for fun.
Upside: An alternative to *Linux*.
Downside: The ugliest pages you'll see.
STF Rating: 60%

Introducing ATARI ST machine code

R Pearson
S Hodgson

zzSoft

Roger Pearson's book is a good starting point for assembly programmers, and it's still in print (see 1101010110101).

from System Solutions (☎ 0181 6933355) – flip to page 18 for more on the PAK.

2 *No, not as such. Since the STE doesn't use tricks like virtual memory, adding more of the real thing won't give you a speed increase. That said, though, it certainly feels like a faster machine with 4Mb installed, and you can run multitasking systems such as* MagiC, *which actually do perform tasks faster than standard TOS.*

3 *No, the ST doesn't work like this. Due to hardware design limitations, the ST series can only address a maximum of 4Mb of RAM. The PC was originally designed around 640K of memory, and the expanded and extended memory systems simply enabled a very old system architecture to access more RAM.*

DRIVE A PRINTER

Q Where can I get hold of printer drivers for more recent models? Many companies no longer support the ST, but I'm desperate to upgrade.

J Percy, Llandeilo

A *Although most new printers no longer come bundled with ST printer drivers, don't give up hope! Most PD libraries stock printer drivers for specific pieces of software – for example, there are dedicated drivers for the HP DeskJet, LaserJet and Epson Colour Stylus printers for use with* SpeedoGDOS *applications (such as* Papyrus*). Older software with its own printer drivers may be a problem, but if all else fails, you can switch your printer to Epson compatibility mode and use it that way.*

GIVE US AN 'S'

Q What do the letters 'ST' stand for? Is there a tale to be told?

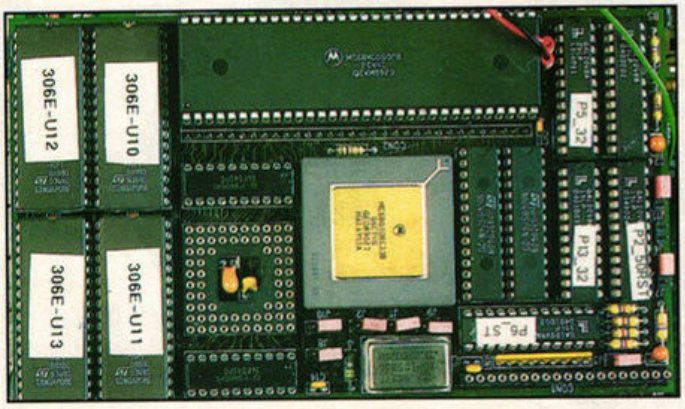
Bob Gregory, London

A *There are two theories. For some time it was thought that the ST was named in honour of Sam Tramiel, one-time president of Atari.*

The more probable one is that 'ST' stands for Sixteen Thirty-two. This refers to the 68000 chip, which has a 16-bit address and data bus for external operations and uses 32-bit buses for internal ones. This theory is supported by the fact that the TT's 68030 chip has 32-bit internal and external buses (thus, Thirty-two, Thirty-two, giving TT).

Of course, it's conceivable that both theories are correct – or that they're both wrong. And neither explains how the Falcon came to be named after a bird.

Please don't send any more letters to the *ST FORMAT* office, because there won't be anyone there. We won't actually spontaneously combust, but our office will simply vanish into the ether...



Adding a new CPU to your ST isn't as simple as plugging a chip in – you need extra hardware to make it work with the other components on your motherboard.

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GD1370 Poker Dice	GD2645 Picture Mix	GD2254 O.C.R.
GD2778 Mobsters City	GD2646 Alphabet Mix	GD1925 Word Finder
GD2659 H.E.R.O.	GD2649 Maths Fun 1	GD2064 Route Finder
GD1958 Coarse Angler	GD1884 Play Time	GD2318 Grocery Lister
GD2779 Grannies Garden	GD2248 Clock Time	GD2477 The Financier

The above selection is only a small example of what is available. Our printed Shareware Guide is now over 250 pages, with screen shots and descriptions for hundreds of disks of all that's best in Public Domain and Shareware for the Atari computer, including all the latest utilities and applications. So if you want the best, discover why thousands of users worldwide have for over eight years chosen Goodman's, send for our catalogue today.

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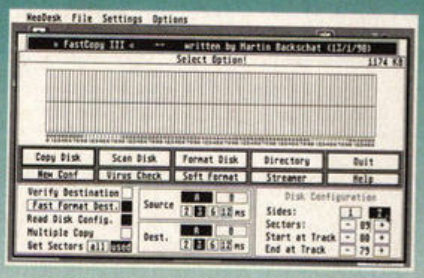
Absolute beginners

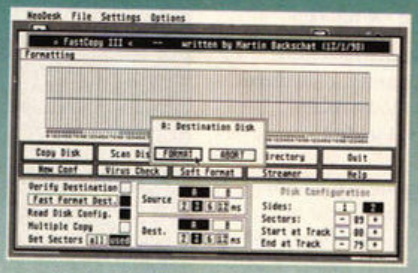
Single-sided, double-sided, high density, what does it all mean? Peter Crush explains how to format floppy disks.

FASTCOPY 3

FastCopy 3 is one of the most useful public domain utilities ever written for the ST. It can write all kinds of disk formats, copy disks and even performs a clever 'streamer' backup of your hard drive. It's available from any good PD library – see page 46.



1 Select A as your destination disk, then adjust the number of tracks and sectors. The safe, standard setting is 80 tracks (start track 0, end track 79) and nine sectors.



2 Put the disk to be formatted in Drive A, then click Format in the main menu. *FastCopy 3* runs as a program; change its name to FCOPY3.ACC to run it as an Accessory.

Before you can use a floppy disk in your ST you need to format it. When you buy floppies, they're blank, and you can't write any information on to them until they have been 'formatted'. The formatting process involves creating tracks and sectors on the magnetic surface of the disk. Your ST can then write data along the tracks.

The usual ST format is 80 tracks per side of the disk. They are concentric, and each track is divided into nine sectors. Each make of computer uses a slightly different structure, so you often cannot read or write disks formatted on other machines, such as Amigas and Macs.

When you buy floppies they're blank, and you can't write to them until they have been 'formatted'

Your ST has its formatting ability built into the Desktop, and a number of other methods are available too. Remember to slide the write-protect tab (found in one corner of the floppy) shut, so you can't see through the hole, before you try to format a disk.

Other methods

Although the ST's built-in formatting is convenient, it's not very versatile, because you can only access it from the Desktop. There are various other ways to format disks, some of which are provided by Desk Accessories (see *STF* 83). These have the advantage of being accessible from most GEM programs, so you don't have to quit to the Desktop.

You can also specify different formats (see the Sectors? Tracks? panel) in addition to the standard 80 tracks and nine sectors. Examples of alternative formatting utilities include *Format 11* (which can format up to eleven sectors per track), *Ultimate Item Selector* and *FastCopy 3*. The alternative ST Desktop *NeoDesk* also has its own formatting routines.

SS, DS, DD, HD

Early STs were equipped with internal drives which could only read and write on one side of a disk, providing 360K of storage space. Later STs and all STEs were equipped with double-sided drives which could use both sides of the disk, giving 720K of space. As virtually all ST software is now supplied on double-sided disks, you should add a double-sided drive to your ST if it only has a single-sided one. They aren't expensive.

You should buy double-sided, double density disks, because these work in both single and double-sided drives. Don't bother with single-sided disks, because although they will work in all ST disk drives, they are often of inferior quality. The correct disks are marked 'MF DS', which means Micro Floppy, Double-Sided.

You can also specify different formats in addition to the standard 80 tracks and nine sectors

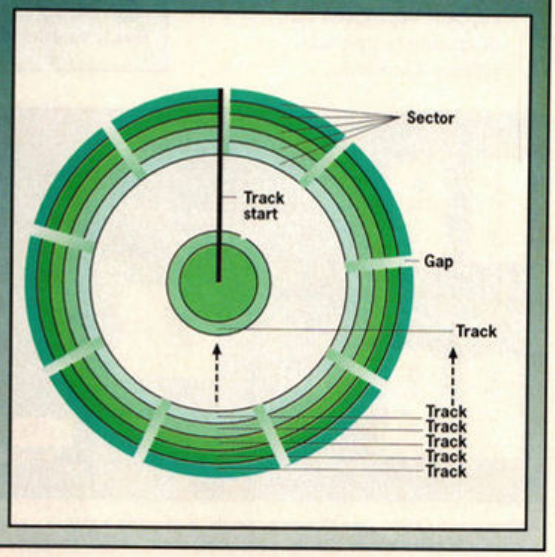
Don't buy high density (HD) disks, as used in PCs and Macs. They provide 1.44Mb of storage space, but your ST can't use them unless you've added a high density drive. These were never provided in STs as standard, but you can get upgrade kits from a number of suppliers.

Falcons, however, do have high density drives which work with all types of floppy disk. Expect to pay a premium for the high-capacity HD disks, though. *stf*

SECTORS? TRACKS?

The number of tracks and sectors on a floppy disk determine how much information can be stored on that disk. The diagram (right) shows how a disk is physically made up of tracks and sectors.

Each track and sector holds a certain amount of data, so the more tracks and sectors formatted, the greater the capacity of your blank disk. For example, your ST's Desktop formats disks to 80 tracks and nine sectors, which enables you to store up to 720K of information on that disk. Other utilities, such as *FastCopy*, enable you to create up to 82 tracks and 11 sectors on a disk, although this can cause disk errors. Our Cover Disks are formatted to 80 tracks and ten sectors, enabling us to put around 790K on to each disk.



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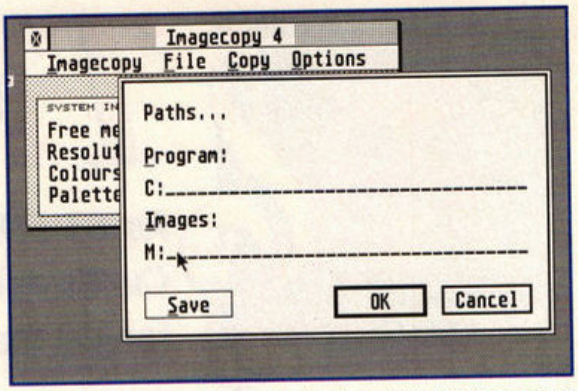
RAM disks: the return



Although *MaxiDisk* can be used to store files quickly, remember this is a temporary measure. You must copy them to disk before switching off.

MaxiDisk maestro Peter Crush presents his seven top time-saving RAM disk tips.

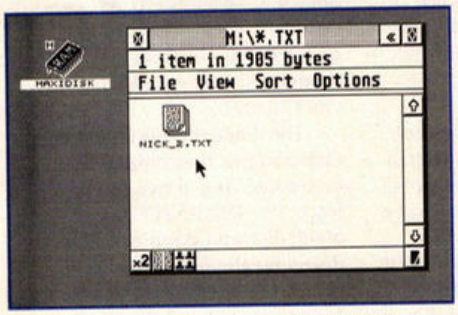
Last month's Absolute Beginners showed you how to set up a RAM disk using the PD utility *MaxiDisk*. This follow-up article shows you some more advanced features and useful applications. Just look at the ways *MaxiDisk* can make your life easier.

1 Disk or file copying

MaxiDisk can save you a lot of disk-swapping if you only have one floppy drive. Drag the programs and files you want to copy from the source disk into the RAM drive. You can then copy the files to one or more new floppy disks. They will be written from RAM, faster than usual. This method can be used to copy a whole disk if your RAM drive is big enough.

2 A temporary clipboard

Many ST programs use a 'clipboard' feature – data being cut and pasted, for instance, is held on the clipboard (an area on one of your drives) temporarily. The 'cut' data is written to disk, then recalled for pasting when needed. By specifying drive M as your clipboard, you'll get even quicker operations, be able to look at the contents directly and reduce clutter.



Installing drive 'M' on your desktop makes *MaxiDisk* as accessible as any other disk or drive.

3 A downloading store

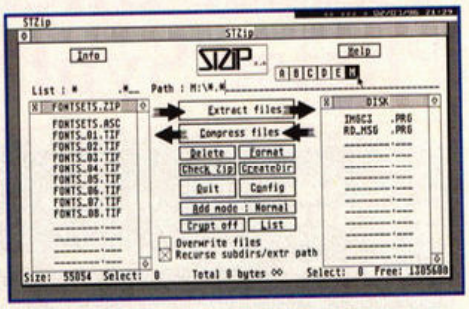
When you are using comms software such as *STalker* to log on to bulletin boards, you'll often want to download files and programs. Usually, they are written to floppy or hard disk as they arrive at your ST, but you can select the *MaxiDisk* drive instead. This speeds things up and enables you to virus check the files before you store them permanently elsewhere.

4 E-mail preparation

Prepare your e-mail message using a word processor or text editor, but don't save it to a real disk – save it to the *MaxiDisk* drive instead. Run your comms software, import the message from the RAM drive and send it. For most messages it doesn't matter that you won't have the original text on file. Many e-mail packages store all your messages anyway.

5 Saving screen grabs

If you're using *Imagecopy* or similar 'snapshot' utilities to grab pictures from the screen, saving the grabs into a *MaxiDisk* drive is quicker than saving them to a 'real' disk. If the results aren't quite right, you can take replacement grabs without filling up your disk space with unwanted duplicates. Don't forget to save the final images on to a real disk.



Save space and time by extracting archives to a RAM drive before transferring them on to disk.

6 Converting files

You might have to change the format of a screen grab or picture before you can use it in a particular program. For example, a TIF pic might need converting into a PI3 file for use in *Degas*. Set your file conversion program to read from and write to the *MaxiDisk* drive – it'll be faster. You can use the same trick for document files: *Protext's Convert* program will read, say, a DOC file from a *MaxiDisk* drive, then write it back as an ASCII text file.

7 Unpacking archived files

Many PD programs are supplied as compressed ZIP or LZH files to save disk space. When you're expanding them to their original size, you need to find a blank disk to transfer the files on to before you run the dearchiving software. Instead of expanding them on to this real disk you can use *MaxiDisk*, then try the programs from there to see if you like them. It's a much faster way to work.

The more you use *MaxiDisk* the more uses you'll find for it and the more productive your ST will become. But remember, when you switch off the computer anything in the RAM disk will be lost, so be sure to save anything important to a real disk. ***stf***

ADVANCED FEATURES

Last month's tutorial showed you how to get *MaxiDisk* working from your Auto folder. When the program runs you have enter the size of the RAM disk and the partition (drive letter) to be assigned. Instead of entering this information each time, you can make an INF file which *MaxiDisk* acts on automatically.

You'll need an ST word processor or text editor which can save in ASCII format to do this. If you require a 750K RAM disk called drive M (as set up in the previous tutorial), just write "750 M" and save the document as an ASCII file. Call it MAXIDISK.INF and copy it on to your boot disk.

Next time you re-boot, *MaxiDisk* will install itself using this information file. If you want to change the size of your virtual drive, edit the INF file and save it over the old one.

The small additional program COPY.TTP (included on this month's Cover Disk) can be used to copy files or programs into the RAM disk automatically. Just place COPY.TTP on your boot disk.

The required parameters are the names of the source and destination folders. For example, C:\COPY_IT M:\ will copy all files within the drive C folder COPY_IT to the *MaxiDisk* drive. Include the line COPY.TTP C:\COPY_IT M:\ in MAXIDISK.INF to automate this procedure.

REMEMBER

The memory you assign to *MaxiDisk* isn't available for running other programs. For example, if you have a 1Mb ST and assign 512K to *MaxiDisk*, you're effectively turning your ST into a 512K machine, and you'll only be able to run software which normally runs on an unmodified 520ST. RAM disks really come into their own on a 2 or 4Mb machine, though.

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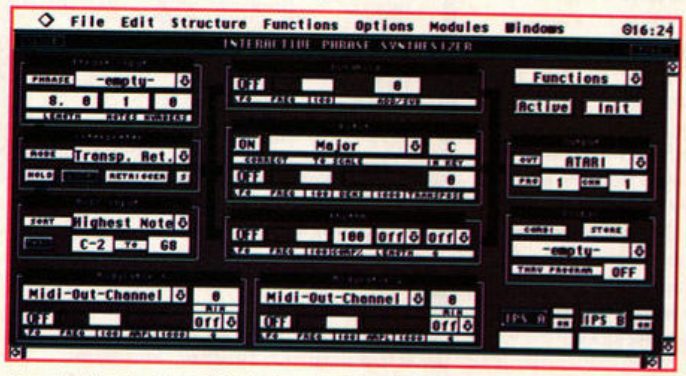
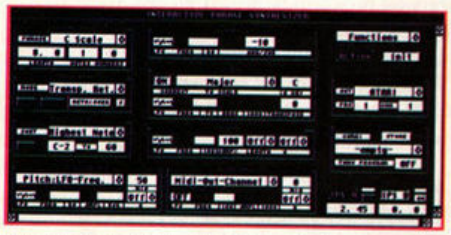
The Score

As *ST FORMAT* prepares to go off the air, Andy Curtis asks guest DJ Richard Manley-Reeve to tackle that tricky *Cubase* IPS screen.

Cubase Interactive Phrase Synthesiser



Cubase's Interactive Phrase Synthesiser: user-friendly it ain't. However, if you follow our tutorial, you'll soon have it tamed.



Here the pitch, velocity and rhythm are being constantly varied to create a totally new pattern. Crazy – but nice.

The Interactive Phrase Synthesiser, or IPS, must surely be one of *Cubase's* least used facilities, possibly due to its daunting screen full of modulators, interpreters and global combis. However, if you spend a little time with it, it is possible to produce effects ranging from the practical to the downright silly.

The IPS enables you to process MIDI data. Its uses are many and varied, ranging from randomising the velocities of a hi-hat part to creating whole MIDI sequences which can be triggered with just one note. This brief guide will help you get through the jargon and into its depths. The possibilities are endless, though, and we've really only scratched the surface in this tutorial.

LAYOUT

The IPS is divided into three sections: input, processing and output. First, select a part or phrase in the Arrange page of *Cubase* and copy it to the Phrase Synth, where it appears in the Input section. You'll find the Copy to Phrase facility in the Modules drop-down menu. Next, you can define the interpreters and MIDI input, so that if you play a chord on your MIDI keyboard you can choose which note will trigger the phrase, and how the phrase will be replayed.

So far it seems easy enough: you play a note and a phrase or riff comes out. However, the IPS can do much more than this. You can use the processing section to set the IPS to alter the note length, velocity, MIDI channel and even the actual notes in the riff while it plays.

There are three fixed processors for dynamics, pitch and rhythm, as well as two modulators which can be mapped to any parameter. The LFO (Low Frequency Oscillator) speed and waveform can be edited to determine how the parameter is changed.

Think of it as being like a set of knobs on an analogue synth, controlling, for example, velocity, note length and transpose. The modulators in the IPS have the effect of someone turning the knobs while you play. The LFO frequency determines how quickly they turn, the amplitude controls the range of movement, and the waveform can be anything from a smooth increase to a random forward-and-back motion.

The output section contains the master effect on-off, preset load and save functions, MIDI program change and output channel. You can also select IPS A or B. They are exactly the same, so you can have two different setups and switch between them, or use both together for some truly outrageous effects.

VARIATIONS

One of the great things about the IPS is its ability to generate random phrases or sequences. To get the idea of this, record a C major scale over one bar. Select the part by clicking on it, and then choose Copy to Phrase. When you open the IPS, your part is shown in the Phrase Input section at the top left of the IPS screen.

Make sure IPS A is on, and click the Active button. Now when you press any key, the scale will play from that note. Go to the Interpreter box, select Hold, play middle C on your keyboard and you will hear the scale loop constantly.

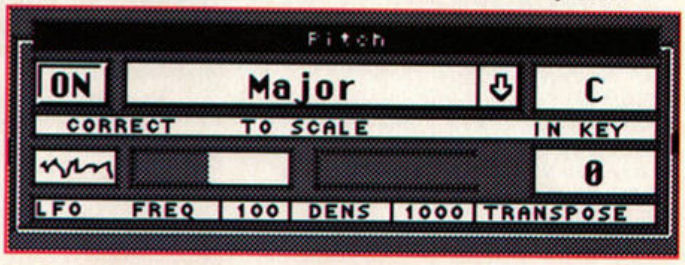
Boring, isn't it? To start creating some variation, go to the Pitch module (in the centre) and select the Random waveform in the LFO box. The notes of the scale now play back in random order. You can apply the same technique to the dynamics and rhythm. This is great for adding 'human' feel to a mechanical-sounding hi-hat pattern.

TRY IT AND SEE

The best way to learn what the IPS can do is to experiment and not be put off by its complexity. Try using different phrases and settings, or apply Scale Correct to generate exotic melodies. When you get something you like, you can record the results on to a *Cubase* track by selecting MROS in the IPS output. If you want to get seriously wacky, try setting one of the modulators to Program Change or MIDI Out Channel...

The demo on this month's disk contains four examples, each consisting of two tracks (copy IPS_DEMO.TOS to a blank disk and double-click to dearchive the file). The short phrase was copied to the IPS for processing, and the results were recorded on to the next track. Listen to each example in turn – they will give you some idea of the possibilities of the IPS, so you can use it to create original and interesting music for yourself.

Richard Manley-Reeve



The Pitch LFO changes the playback order of the notes in your riff.

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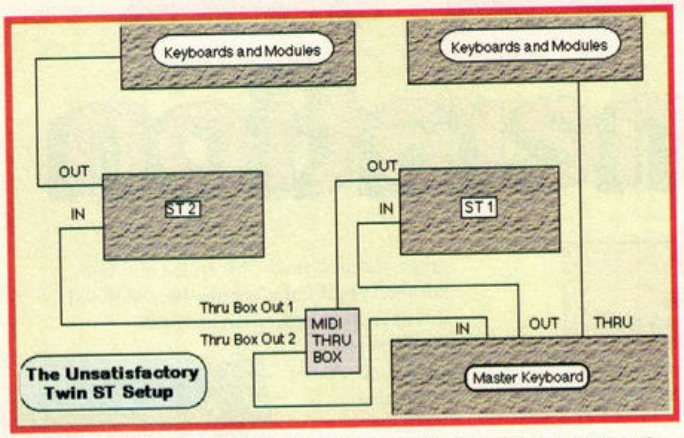
Quick questions



You can run a MIDI setup with two STs, but it isn't the easiest way to get extra channels.

SYNC'ING

Q Would it be possible to link my two STs with MIDI cables via a Thru box, with each machine running the *KCS* sequencer program, to achieve 32 MIDI channels? I want to be able to save the finished sequence on one disk in one file.
Andrew Lea, Yeovil

A *What you want to do is very tricky, and gives rise to a number of annoying problems, Andrew. The only way to use two computers together is to make one ST the master and the other the slave. Look at our diagram (above) to see how it's done.*

Each ST has its own MIDI devices which it alone controls. To use both STs and their devices together on playback, you need to set the slave ST to Sync to MIDI clocks or MIDI Time Code (MTC). When you start playback on the master ST, the slave will synchronise with it and play correctly.

Any sequencing on the slave ST has to be done separately by repatching the MIDI output from the master keyboard. When you have two distinct sequences which play together as you desire, you can make the link and play back the music on both sequencers simultaneously.

This is a clumsy way of achieving 32 MIDI channels, but it will work if you absolutely need it to. As for saving to disk, each sequencer will save its own data file on its respective ST, so you will end up with two data files.

DIY BACKING

Q I have some basic MIDI equipment which I wish to use to compile backing tracks. I am a traditional entertainer and I intend to sing to them in clubs and pubs.

I have a Korg DP80 keyboard, a Yamaha EMT-10 and an Alesis HR16 drum machine. Most of my synth sounds come from an old Roland U110. I want to be able to play my guitar over the tracks and sing as well, so I have a complete band without having to pay them!

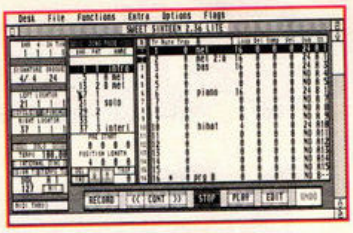
I have been playing around with the *Steinberg Pro 12* software which you gave away years ago on a Cover Disk and I quite like it, but it doesn't have the features I need. I have considered going for *Pro24*, as per your review in issue 84, but the score page looks too limited for me.

Can you please recommend a cheap package (under £150) which will do all I want and support the synths I have?
Gordon D'Eath, Worcester

A *There's a simple solution to your problem, Gordon, and one that only costs £99.* Cubase Lite, *available from Harman Audio (☎ 0181 2075050) sounds like the ideal tool for you.*

It is a cut-down version of Cubase, *but includes a well-specified score editing page suitable for your requirements. You also benefit from the industry-standard arrange page which has made Steinberg famous throughout the MIDI industry.*

The package comes with a number of printer drivers, so if your printer is a standard Epson-compatible unit you should have no problem printing out your scores. The £50 you have left over should be just enough to buy the ST FORMAT *team a drink…*



Sweet Sixteen Lite, available in the public domain, synchronises to MIDI clocks.

KITCHEN SYNC

Q Can *Concerto* take an external clock signal? I want to transfer MIDI data from my Yamaha QY10 and the only way I can do it is to set the tempo exactly the same on the QY10 and *Concerto* and hope for the best.
Phil Milston, Skipton

A *Unfortunately, Phil,* Concerto *has no facilities for external synchronisation. Your best bet is to look around for a better-specified program.* Sweet Sixteen Lite, *widely available in the Public Domain, will synchronise using MIDI clocks. Contact LAPD on ☎ 01773 761944 to obtain a copy.*

DISTORTION

Q I know that digital signals are prone to distortion as well as audio signals, so how can I remove the MIDI distortion I am getting? Even if I set the fader very low on my mixer, I can hear that certain loud MIDI sounds cause distortion and this is quite unacceptable. It seems worse with piano sounds and percussion.
R Wentworth, Evesham

A *First things first: there is no such thing as MIDI distortion. However high you set the MIDI volume on your MIDI instrument, it is merely an instruction to that instrument to play the sound as loud as it can. Distortion can only occur after your synth has converted this MIDI instruction into an audible sound.*

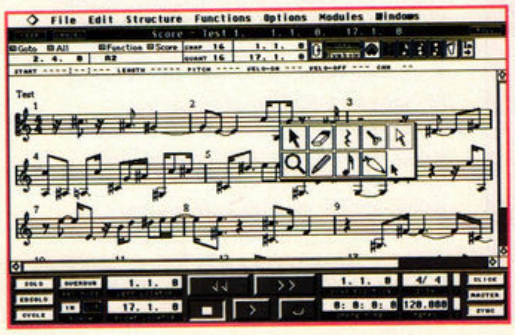
Piano sounds do have a tendency to overload audio systems, so try reducing the output level of your synth. Next, check the trim pot on your mixer and reduce its level.

These two adjustments are usually enough to get rid of the distortion. If the problems persist, and especially if you still hear the distortion while listening through headphones, there just might be a fault with the synth itself. **stf**

BREAKTHRU File Block Track MIDI Options

TR	RC	PL	NAME	CHAN	VOL	PAN	BNK	PRG
01	●	▶	guitar	A01	127	---	---	025
02		▶	bass	A02	127	---	---	034
03		▶	piano	A03	127	---	---	001
04		▶	warm pad	A04	127	---	---	090

MIDI Volume values do not create distortion. All these tracks are set to a maximum 127 value for MIDI volume, but this, in itself, will never cause distortion of the sound.



The Score Edit page in *Cubase Lite* is well equipped and enables you to create music and edit and print out your pre-recorded MIDI data.

FAREWELL…

As this is the last ever issue of *ST FORMAT*, The Score is no more. I would like to thank all the readers who have written in with their comments and suggestions – it was much appreciated.

Use your Ataris with pride! They are still the cheapest and most effective route into MIDI sequencing and will be a valuable tool for many years to come.

You can always reach me via e-mail at: andy@adlib.co.uk and MIDI support continues on the Ad.Lib BBS for those of you with modems. The BBS number is 0191 3702659. Our SausageNET Music and MIDI message echo will continue to deal with your musical tips and questions.

Thanks, once again.

Andy Curtis

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Atari Force: The Next Generation

Would you trust this lot to save the universe?

Script: Cavan Scott
Art: Paula Mabe
Still not receiving a credit: Mary Lojkine
He who thinks he should be obeyed: Nick Peers
With thanks to: Chris Lund and Lee Seitz

Forget Flash Gordon's tights and help Cavan Scott welcome the real cosmic heroes.

It is hard to say how successful the Atari Force mini comics were. Collectors weren't pleased about the story lines being split over two or more books, meaning that completists were forced to buy the next cartridge.

Writer Gerry Conway rushed to his own defence, saying that the multi-issue stories were only included to give the creative team space to provide backgrounds for the characters. Small gripes aside, DC Comics must have had faith in the exploits of the Force, because in 1984 a brand new regular-sized series was launched upon the unsuspecting public.

The team behind the original Atari Force had been quick to point out that its group of adventurers hadn't a single superpower between them – they were merely humans with enhanced physical and mental abilities. However, by the second series the heroes had strayed firmly into the realms of the Man of Steel.

Even heroes grow old

New Earth hadn't been the paradise the Atari Institute expected, and 20 years after the founding of the colony Martin Champion, the fearless leader of Atari's first exploration of the multiverse, was a broken man. His wife, Lydia Perez, died in childbirth and Champion was declared two dilithium crystals short of a warp-drive due to his insistence that she died at the hand of the evil Dark Destroyer.

In an uncanny example of art predicting life, the Atari Institute refused to accept that its destruction was just around the corner, so Champion joined forces with a desperate group of renegades to form a second, grittier Atari Force. Taking a leaf out of James T Kirk's book, Champion 'borrowed' his old ship Scanner One and disappeared into the multiverse.

Like father, like son

Gerry Conway returned to writing duties and, along with artist Jose Garcia-Lopez, attempted to bring the Force up to date. Accompanying the elder Martin Champion was his muscle-bound son Tempest. Spurned by his father from an early age, Tempest had unique powers of teleportation. Keeping check on Tempest's many tantrums was Dart, a mercenary who regularly had uncontrollable visions of possible futures, but constantly disappointed the team by failing to predict next week's National Lottery numbers.

The trio of humans was joined by a number of strange beings, including the green-skinned medic Morphea and her adopted child Babe, a huge blue-skinned infant with superhuman strength.

As the series continued, Atari Force also attracted support from Packrat, a schizophrenic thief who reacted to danger by tearing his opponent to pieces with his teeth, and Taz, a bizarre little soldier who bore little resemblance to the manic hero of *Tazmania*.

Babe was always in desperate need of a weight-watch plan.

The token furry animal was delivered in the form of Hukka, Tempest's childhood pet (as discovered by the original team, back in the mini comics).

Although it didn't feature the greatest writing of all time, the second Atari Force displayed far more originality than its predecessor. Lasting 20 issues, the series covered a wide story arc as the Dark Destroyer lived up to his name and wiped out the universe. Despite Champion suffering severe post-armageddon depression, Atari Force later discovered that the bad guy had boobed and his bomb had atomised the wrong universe. Tricky things, these parallel existences.

Home sweet hell

On returning home the crew of Scanner One was captured and put on trial for theft of the ship, conspiracy and leaving the toilet seat up. Once again, Atari wouldn't listen to the truth, but Champion and his crew managed to escape. Together they set off for the original planet Earth, hoping to follow Champion's dream of rebuilding his home world, and bringing the saga of Atari Force full circle.

In the letters page of the final issue, editor Andy Helfer admitted he knew from the beginning that Atari Force would end eventually. Perhaps Atari didn't want to associate its name with a product that was gradually losing sales and popularity? Well, sometimes fiction is stranger than truth. *stf*

Packrat realises to his horror that he has left his unwanted facial hair remover at home.

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Still holding a discontented grudge about the heartless chopping of his 'cheats' strap, Simon Forrester discovers the joys of compact and bijou.

Gamesbusters

Ishar 3

Last month we left you standing by a time gate, waiting to go in. Oh, you didn't, did you? You went through? Fair enough. You'll find yourself in the past, standing in a swamp, being attacked by leopards. If you can kill them, the fur you'll get will be worth a fair bit in the shops of the rich town.

Heading south west from the gate will reveal a clearing. At the far end is a crystal you'll need. Go back to the gate and head south east. You'll come to another clearing, at the far end of which is a tribe of natives. The leader is looking at your pint, so do him in, then head back to the town via the time gate and listen to what Alstar has to say.

Please close the seven gates behind you.

Don't you just hate shopping, especially during the sales, when it's always so crowded everywhere.

Go to the theatre and head through the time gate into the swamp of the future. Watch out for the monsters who'll leap out of the water at you, though. In the clearing to the south west you'll find the Living Sword of Chaos. It's a fairly meaty sword, but can only be used by chaotically aligned characters. Take the pathway that goes north east, then at the junctions head north, east twice, north twice and then west into another clearing. At the south end you'll find a fragment of a meteor. Take it and head back to the time gate.

HEAD NORTH

To the east of the theatre is a new walled garden. To get into it you'll need to head north, then east, then follow the road to the south. There's a chest of cash in one corner of the garden, but the meteor in the centre is far more important. If you put the fragment you collected on top of it, a new gate will appear. It takes you back through time to a mountain range, but don't go through it – you'll freeze to death. Go to the entrance to the rich town, and sidestep north until you hit a wall. You'll find yourself looking at a road which leads north behind a row of buildings. Follow it north past the Hearth tavern.

The next shop you come to will sell you the fur you'll need in the mountains. Each member of the team will also need a rope; these are available in the shop you passed on your way to this one. Damn. It's okay, though, because it's on your route back to the mountain gate. When you get there, don those ropes and furs and step through into the mountains. Don't eat the yellow snow.

Stop Press: Man hits man with sword. Man says, "Ouch." Man hits man back.

Head to the south. When you come to a junction leading east, nip off to collect some Edelweiss (it can be sold later), but watch out for the wolves. If you go back to your southward path, it'll take you up to a ledge. Continue south until you come to two polar bears. Kill them for the practice.

TURN WEST

Turn west and follow the road around until you come face to waist with a giant. He's not the first you'll meet, so waste him. Continuing on this track will take you on a trail of polar bears, giants and edelweiss, so either follow it and return to this junction or turn west now to save yourself some trouble. Watch out for those wolves.

Go past the clearing, heading west until you come to a southbound road. Follow it south until you come to another passage leading west again. At the end of this passage is a strange machine. Leave the crystal from the swamp on it before returning back to the time gate and back into the town.

You'll be met by Erkh Moltus, who'll tell you that a new time gate has appeared in the north west of the poor town. You'll find the time gate when one of your party sees a road which isn't on the map. Head north up it, and then east. You'll come across two lizard creatures which won't let you pass.

STAY PUT

Sadly, that's all I have space for. I'm not going to apologise for leaving you in the lurch, either, because it serves you right. As I've said all along, cheats never prosper. *stf*

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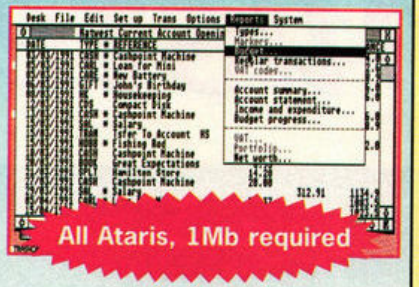

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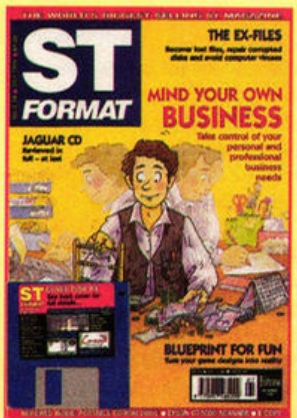

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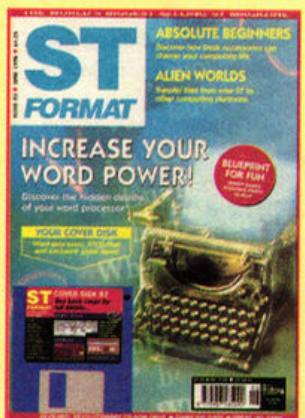

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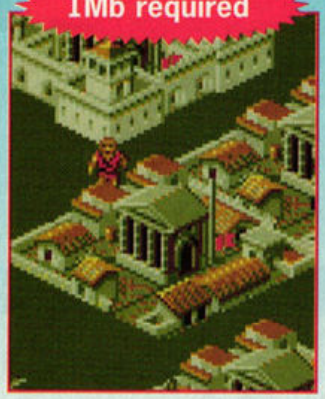

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Atari's downfall

A teary-eyed Cavan Scott examines the rise, fall and rapid plummet of Atari.

A wise soul once wrote that an optimist is a cheerful guy who is blissfully unaware of what is going to happen to him. Others have said he is someone who likes to think his glass is half full.

Whatever the description, most agree that optimism can result in a person viewing their world through rose-tinted glasses. Realism, it seems, is a more acceptable state of mind. Since its birth in 1989, *ST FORMAT* has remained a realistic magazine written for, and by, a group of people who believed passionately in Atari's machine.

When Future Publishing launched the magazine, Atari was looking to the future. Instead of merely resting on the laurels of the ST, it appeared to be meeting the challenge of the Amigas and consoles of the late 1980s. The first issue brought news of the STE, and many believed that the introduction of 256 colours on the screen, four-channel stereo and hardware scrolling would silence the ST's critics.

Along with the ST laptop and TT, the STE was expected to carve Atari's place in the future. Sam Tramiel, president of Atari, boasted that the next five years would see the company rise to the top of the home computer market. "We'll dominate the hand-held market," Tramiel confidently enthused, "and kill off Nintendo."

Unfortunately, as time rolled by, Future's fledging magazine found itself reporting on a world that was anything but secure. At the 1989 Personal Computer Show the Atari village dominated Earl's Court, but it concentrated on the company's PC range, consigning the TT and STacy, Atari's shot at a laptop, to a dark corner. To the surprise of all, the STE wasn't even mentioned.

ST FORMAT was never content to stick its head into the sand. In response to Atari's handling of its own projects, editor Steve Carey sent an open letter to Bob Gleadow, the managing director of Atari UK, stating quite clearly that: "The ST is a fine machine that Atari seems incapable of selling properly."

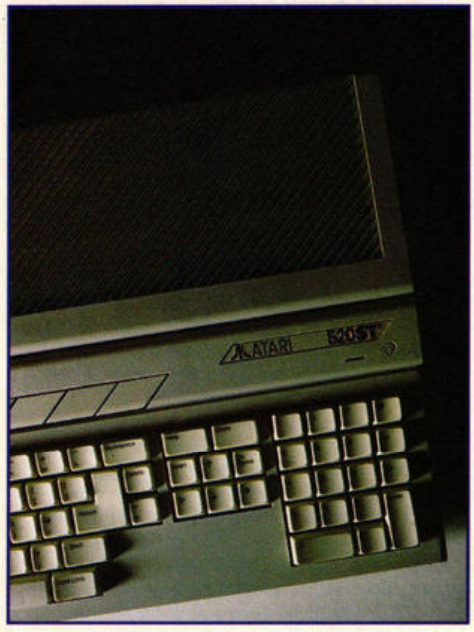
In the company's defence, Gleadow simply insisted that Atari would continue to push forward. 1991 was going to be, in his own words, "big and exciting." However the story remained the same: Atari made promises and predictions that were never fulfilled. The ST Book and Falcon arrived, but continually faced the same old problems of lack of compatibility and little support from Atari itself. Other projects, such as the ST Pad – a miracle machine which could read handwriting – were shelved after months of delays.

Gleadow insisted that Atari would continue to push forward. 1991 was going to be "big and exciting."

In July 1993 *ST FORMAT* announced that Atari was abandoning the home computer market to return to its console roots, in the shape of the Jaguar. Two years on *ST FORMAT* readers gave their own verdict on the 64-bit machine's capabilities: 52 per cent of readers voted against the magazine covering any Jaguar news.

The Jaguar CD-ROM drive, first announced in issue 55, took two years to actually arrive on English soil – in the midst of an almost complete absence of promotion. Likewise, the Jaguar Virtual Reality headset stayed virtual as Atari backed out of its deal with UK pioneers Virtuality.

Now the Atari market looks as if it has finally run out of steam, despite claims in February that Jaguar-related products are still being developed. Atari's merger with the hard drive manufacturer JTS Corporation has plunged the Jaguar into further uncertainty and in recent months Virgin Megastores and Beatties have been dropping prices to shift their remaining stock.



Atari's machine of the future – the STE – was soon abandoned as a 'mistake of the past'.

Throughout its time *ST FORMAT* has refused to let the decline of the Atari market affect its resolve to offer the best possible magazine for the ST user. Even as Atari fumbled its machines, *ST FORMAT* delivered hundreds of articles which encouraged its readers to take their machines beyond mere gameplay. Proving that the ST has always been a versatile computer, the magazine has run tutorials explaining how to write programs, compose sweeping symphonies and – putting our own careers on the line – turn your desktop into a top publishing house.

The future of the ST has always been in the hands of the people who use it. So, as *ST FORMAT* faces the final curtain, we hope you'll continue to stretch the boundaries of the ST and your own creativity. We couldn't ask for more. ***stf***

In the beginning was... *ST FORMAT.*

Who knows what would have happened if Atari hadn't suddenly clipped the Falcon's wings?

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All good things...

As *ST FORMAT* prepares to ride off into the sunset, we'd like to tell you what working on the magazine has meant.

Long hours, dark nights, short holidays and a desperate lack of sleep. Isn't it always the same, being a junior doctor? Anyway, that's what kept us going whenever we found ourselves alone in the Future buildings on a deadline week.

There's something to be said for laying out the same page in your sleep *(Tell me about it – Paula)*, or trying to fit 850K of compressed files on to a 780K Cover Disk every month. Mary in particular loved dreaming up headings that were witty, informative and the right length for the available space. And of course, as soon as one issue went to press we were straight on with the next one. Well, Nick was, anyway, although he did find the time for the odd paddle. Mary and Paula crept away to the various other jobs which kept them off the streets between issues.

The last three office members of *ST FORMAT's* editorial team marked its passing the only way we could – by dressing up and sharing a bottle of champagne. Well, New Zealand sparkling wine, anyway. Unfortunately, as these exclusive pictures show, Nick got hold of the bottle and had to be sedated after a passionate speech extolling the

One of the few pleasures of closing *ST FORMAT* was the opportunity to wear our glad rags and drink copious quantities of champagne.

NICK PEERS

One week. That's how close I came to being on *ST FORMAT* for two years. And what a roller-coaster ride it has been! The thrill of writing for a magazine I once read and subscribed to has never really worn off, and for a first job I couldn't have asked for a better start in life.

The highs have to include seeing my prose in print for the first time, writing that *Calamus* tutorial for issue 70's desktop publishing feature, gradually getting to look more like Dean Cain and becoming editor of *ST FORMAT* in March. In many ways I was just getting the hang of the job when we closed. The low was being bitter and twisted for so long, but no more!

I'd like to thank everyone who's contributed to the magazine over the years, helping to make *ST FORMAT* the fine magazine it still is today. Not many publications can claim to pack so much into so little space. Congratulations to all concerned.

I intend getting horribly drunk on more than one occasion to mark the magazine's passing. I'm also going to start using my own ST a bit more now that business and pleasure will no longer mix. I still haven't managed to transcribe more than one *Queen* song into MIDI.

FRANK CHARLTON

The high point of working on *ST FORMAT* had to be July 1995's Spotlight shows in London – a chance to meet the readers and fellow comms nuts I'd known on-line for years. At the other end of the scale, one of the lowest points was watching my Falcon's hard drive lose every bit of data while I was busy researching the Ex-Files article on data recovery – the definition of irony!

My favourite article was definitely the shareware piracy feature from issue 66. It highlighted a problem many didn't know existed, and was my first really gritty feature.

To mark the passing of *ST FORMAT* I'll be trooping down to Bath to get extremely drunk with Nick, so we can snivel on for hours about The Best of Times. And how Mary used to add bits to our copy *(Like this bit – Mary)*.

In the future I'll be staying with the ST scene, and looking forward to new products such as *APEX 3* and *Nemesis*. Plus, I intend staying in touch with all the friends I've made on-line. See you all on Internet Relay Chat!

ANDY CURTIS

My first ever review – of *Form Finder* in issue 42 – has to be one of the best moments for me. It was half a page of pure joy seeing my name in print for the very first time. At the other end of the scale, the worst disaster was the MIDI feature in issue 79. A change in the featured program at the last minute, coupled with a hard disk crash that destroyed all my work, was a nightmare. Ironically, it's my favourite article. Success in adversity is a wonderful thing.

To mark the magazine's passing I shall indulge myself with a large plate of Cumberland sausages, and a few tears. And for the future? New work with *Future Music* beckons, along with the expansion of Ad.Lib's recording studios.

All the best and try to stay reasonably relaxed. That's quite important. You've been kind. Thank you.

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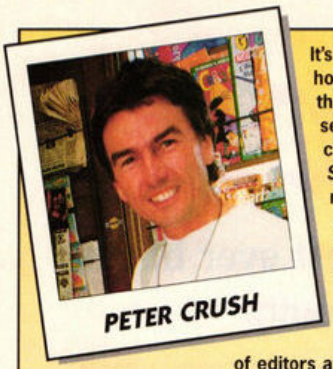


PETER CRUSH

It's my dubious honour to be the longest serving contributor to *ST FORMAT* – my first review was in issue 9. Since then I've outlived a long line succession of editors and staff writers – that's what you call tenacity! I first started writing for *ST World*, but preferred the friendlier atmosphere to be found at *ST FORMAT* and have enjoyed it immensely.

Not having to meet those dreaded monthly deadlines will be strange, a bit like the feeling when all your exams are over. My wife Lynda is delighted at the prospect of me spending less time in front of the ST, but I'm still sad about the passing of the best computer magazine.

There's never been so much excellent software about as now. I can assure you my machine will continue to be used for as long as it keeps going, and I promise *never* to buy a 'PC contemptible'. I will, however, admit to purchasing a Mac: it's the nearest thing to a modernised ST and I was looking forward to reporting on how it runs ST software via the latest version of *MagiCMac*. Alas, that and other articles and features I had started will never be seen in these pages.

Look back and you'll see *ST FORMAT* is an encyclopedia of everything Atari. It's been great to have been a part of it and I'll miss it. Goodbye readers, best wishes for the future, and for Future!

DUG ARMSTRONG

In all the years I contributed to *ST FORMAT*, it never ceased to amaze me how much more interesting it was to read and write about Atari machines than any other.

Perhaps it was the versatility of the hardware, the amazing inventiveness of the programmers, or simply the sheer die-hard fanaticism of the owners. Even when the ST market began to fade, these factors combined to facilitate many fascinating projects.

Free from the corporate newspeak and cynical marketing angles of most other computer mags, I was able to build Daleks, faff around with pictures of my cats (Frank, Vince and Zappa) and generally have a damn good time, all thanks to my trusty Falcon and *ST FORMAT*. My own favourite piece was Comic Capers (*STF 77*), which gave me an opportunity both to interview *Strontium Dog* artist Steve Pugh, and to deliver my own personal message to Atari via the sword of Spartak the Barbarian.

I know many people will miss *ST FORMAT* once it's gone. I know I will. Thanks to all the readers over the years who ultimately made it possible, Nick, Frank, Karen and the team, and – what the hell – even that annoying individual who edited the good bits out of my captions!

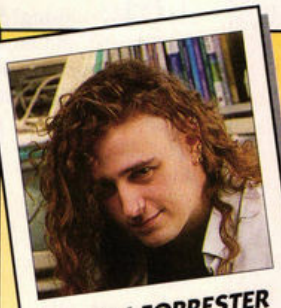
virtues of playing with a floating midfielder "to give the lads some options" in *Team*. The youth of today, eh.

However, before these shots were taken we ably and diligently contacted the five main contributors to *ST FORMAT* from over the years and asked them, once they'd stopped blubbing, to tell us how they feel at this historic moment. In the finest tradition, Mary was forced to hassle the Hairy for his picture, phone Frank in the middle of an armed siege for pricing details, castigate Andy for missing yet another deadline *(Be stressed, Andy, be very very stressed – Mary)*, wade into Peter's copy with a knife, cutting great swathes from it and completely rewrite Dug's captions *(Repeat after me: "It's a caption, not an essay" – Mary)*. Nick opted to sub his own text, citing 'editorial privilege' *(But alas, he's gone home, leaving me alone in the office, heh, heh, heh – Guess who?)*.

Before leaving, we'd like to thank you all for supporting the magazine from its conception through to its twilight years. We hope you'll miss us. We know we'll miss you. There's something special about producing a magazine for people who actually use their computers, rather than just boasting about how much RAM they have.

Oh, and next time you have a small sherry or a swift half, raise your glass to the greatest creation of this century. And once you've recognised *Star Trek*, don't forget to toast *ST FORMAT*. It was fun. ***stf***

And issue 86 was completed. And on the seventh day the crew – Paula 'The Crayon' Mabe, Mary 'The Knife' Lojkine and Nick 'Birmingham City Rules' Peers – collapsed in a heap.



SIMON FORRESTER

For me, save possibly for the boy Peers' emergence from his bitter and twisted phase, the high points were writing the 3DIY feature (now on-line), creating *The Espers* and the intense amounts of drinking that the mild-mannered team turned out to be capable of. To be fair, there are a few things that paled the whole experience though, especially those irritating-head-butt-the-desk joystick ports just waiting to break free of their not-so-secure bonds and make GEM all the more unusable.

Still, I plan to commemorate *ST FORMAT's* demise by dragging an aeroplane out of the sky with a certain piece of ST hardware (thus ending a long-standing argument), and weeping over the fact that now *ST FORMAT* is no more I'm going to have to find another office to hang around in in the more relaxed moments of my freelance career. I guess Nick's *.net Specials* office is a possibility...

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Feedback

Nick Peers looks forlornly over the last ever batch of Feedback and weeps for his lost youth.

Kelstar writes

A few months ago I began a diskzine named *Kelstar*, which was reviewed in your PD section *[STF 84, 3%]*. I feel I should point out one or two things which I believe may have misled anyone who read this review.

First, I have no objection at all to the reviewer not enjoying the content of the magazine. What I do object to is being accused of "pinching" and "cribbing" text files for use in the magazine. I would like to point out that that of 60 text files used, seven were taken from BBSs and were used as intended by the original authors. The rest of the articles were written either by myself or by the people who contributed them to the magazine. To insinuate otherwise is very misleading and indeed insulting.

The reason the content of *Kelstar* is fairly adult is that I am in fact an adult myself, as are the vast majority of my readers. Many of the other diskmags have used the same type of terminology I have used, with no complaints.

The editorial points out clearly that this mag is not meant to be a serious technical magazine. The idea is for anyone to be able to contribute any type of article that they wish without necessarily having to have the technical knowledge to write the more typical computer magazine articles. ST users do have other lives away from their computer desks and those people are the ones who will enjoy this diskzine.

Bob Kell, Kelstar diskzine

stf: *A brief look at issue three doesn't support your theories. Most of the humour used by your contributors is lifted from other sources (the first two entries are a complete transcription of Monty Python's* Fish *sketch and Ron's gag page, which consists of 'Essex girl' jokes rewritten as 'English girl' gags). While all humour is derivative to varying degrees, these articles are little more than a redressing of somebody else's work.*

We also object to this diskzine, an adult-orientated one by your own admission, being freely available in the public domain. I'm not happy knowing that my 12-year-old sister or even younger cousin (both with STs) could easily pick up this disk from any PD library. By all means continue with the adult theme if you so wish, but instigate a system whereby people under a certain age don't have ready access to this 'zine.

Made-up letter...

What happens now that *ST FORMAT* is closing? Should I sell my ST and move on to another computer platform?

Made-up Person, Fulham

stf: *Certainly not! The loss of* ST FORMAT *doesn't mean the end of the ST market – far from it. There are still new products being completed and released by System Solutions, Titan Designs and others. The Atari Shows in September will be good places to find out just how resilient the scene is and what is still available. Join a user group, take a look at the Fast Club's* ST Applications *magazine and keep in close contact with other ST users. The possibilities are endless.*

It's been an honour working on a magazine I've been reading since 1989. I hope we've informed, entertained and enlightened you over the years. Keep using your ST, it has years of life left to it. I'm off to work on the .net Specials *now – keep an eye out for them.*

One thing you've never seen in *ST FORMAT* is a picture of a semi-naked young man. Thanks to Mr C Scott of Bristol for making it possible.

Mary, Paula and Nick would like to thank you all for buying *ST FORMAT* over the years, and especially over the past few months. It's been fun *(Most of the time anyway – Nick)*.

COMPETITION WINNERS

As it's the last chance to print them, here are the winners of the two most recent competitions run in these hallowed pages.

Analogic memory competition

It seems most STs are fitted with 1Mb these days, because we only received 54 correct entries for our massive 1Mb giveaway (*STF* 82). The correct answers were Antidote, 4Mb and Analogic Computing. The winners are:

Mr P Weeks, Neath; Craig Allen, Chorley; Mr G Lisle, Wallasey; J.Schoonenberg, The Netherlands; A Chetwyn, Tamworth; John Shearing, Caterham; A Thompson, Swindon; Mr SG Leaman, Honiton; AV Thomson, Swindon; Neil Taylor, Doncaster; G Ross, Edinburgh; David Bloomfield, Ipswich; Eunice James, Whitworth; Graham Southworth, Bury; Ian Barker, Whitworth; David Roberts, Warrington; Michael Seddon, Southport; Mr GP Lang, Oerlinghausen, Germany; Miss CM Seddon, Nottingham; Mr JS Hallatt, Chorley; Paul Kilner, Barnsley; Mr GJ LLewellyn, Bridgend; Mr S Wilkinson, Grimsby; Mr R Paxton, Slough; Lee Wood, Ipswich; G Williams, Rayleigh; Mr AJ Blythe, Mansfield; Mr IR Kitchin, Great Yarmouth; Christopher McClaren, Perth; Robin Clark, Weymouth; Mr Chris Wood, Wigan; Mr GP Young, Gloucester; Mr AP Rendle, Exeter; Dave Mulberry, London; Mr R Mullett, Weymouth; RE Golding, Ashford; Fred Dean, Cork, Ireland; AR Hull, Oxted; Myk Hilton, Salford; RA Melling, Blackburn; Michael Farman, Great Yarmouth; Stephen John Pike, Norwich; Alan Hughes, Holyhead; Jon Mose, Wickford; AH Cotton, Stourbridge; J Pipkin, London; L Banks, Sheffield; Tony Lam, Kington; Sam Court, Leicester; F Poeydomenge, Brighton; Mr M Beale, Chandlers Ford; Mr MD Small, London; Mr P Powell, Chatham; Mr GL Adams, Chichester.

Jaguar competition

Lewis Carr of Shipley won the Jaguar in the Console Centre's recent giveaway (*STF* 84). The three runners-up, each of whom gets a Jaguar game of their choice, are Stuart Windle of Barrow-in-Furness *(Alien vs Predator)*, K Taylor of Liverpool *(Attack of the Mutant Penguins)* and Roald Sund from Trondheim in Norway *(Pitfall)*. Congratulations to all concerned.

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ST FORMAT

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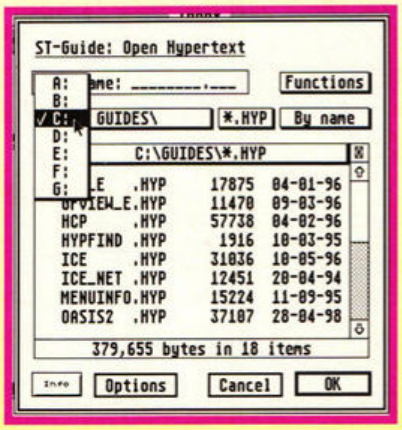

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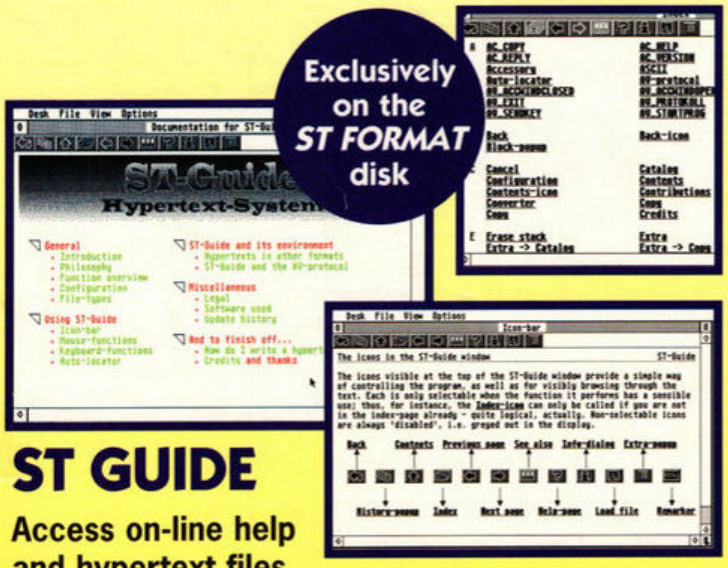

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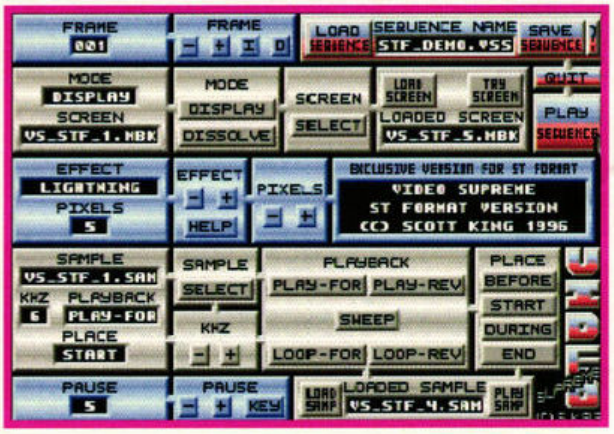

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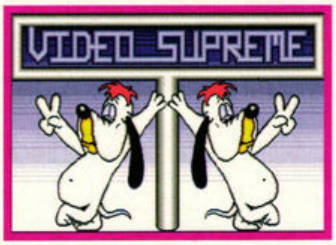

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